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(APRIL 6, 1889, PAGE 688)

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,, H. F. Bourne
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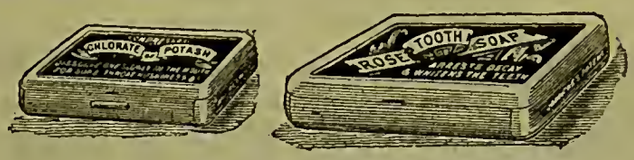

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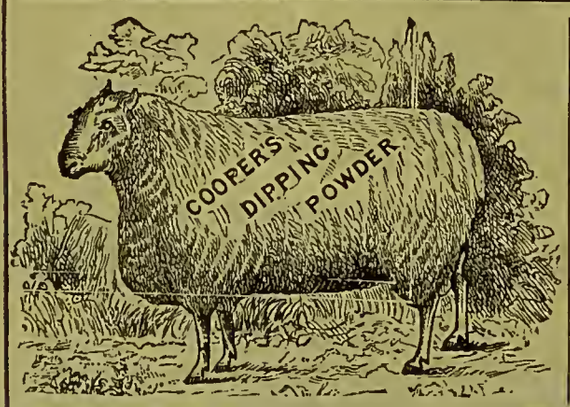

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APPRENTICESHIP wanted in a first-class business; Edinburgh preferred; full particulars. Apply, J. Powell, Wilfred Villa, Stockton-on-Tees.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

See Notice on Front Page of Supplement.

WANTED, a Citrate and Saline maker; winter work found to a good man. State wages, experience, &c., to Butler & Son, Sanvey Gate, Leicester.

IMMEDIATELY, gentlemanly Assistant, about 24, accustomed to good-class trade. Apply, with carte and usual particulars, Jameson & Curtis, Hastings.

WANTED, a qualified Assistant, to manage a General Retail Business for 3 months; salary £1 per week (indoor). George Saville, 161 Kirkgate, Wakefield.

WANTED immediately, Assistant to manage Branch; indoors; state particulars, or personal interview; abstainer preferred. C. Matthews, Chemist, Middlesbro.

FOR CHINA.—Junior Assistant; qualified; first-class experience and references indispensable. Apply, stating full particulars, to D. 46, care of Messrs. Deacon, Leadenhall Street.

WANTED, at once, Dispenser, Minor qualification, Haymarket Stores; outdoors; hours 9 to 7. Apply, by letter only, stating salary required, &c., to The Chemist, 28 Haymarket, S.W.

WANTED, an efficient Chemist: one used to analysing oils and fats. Apply by letter, with full particulars, to "Chemist," Messrs. Deacon's Advertising Offices, Leadenhall Street, E.C.

WANTED, Manager, to take entire charge of Chemist's Business; must be energetic and pushing, abstainer, qualified, and with first-class references. Apply to J. I. Glover, Chemist, Bewdley.

AN energetic Assistant for a Mixed Wholesale and Retail, and to do the Travelling; part salary and commission. Apply, stating age, height, salary, &c., to A. Anning, Maidstone. A vacancy also for an Apprentice.

TRAVELLER wanted, to take the South Coast and West of England. Apply, by letter only, stating age, salary required, and previous engagement, to A. H., c/o Messrs. Horner & Sons, Mitre Square, Aldgate, E.C.

WANTED at once, an Improver, where there is ample time for study; healthy seaside town, South Coast; no salary first year. Full particulars to "Chemist," 1 Gordon Terrace, Fawcett Road, Southsea Hants.

A THOROUGHLY reliable Assistant; not under 25 years of age; neat and accurate Dispenser and good Counterman; accustomed to good-class trade. Address with particulars, I. Westlake, Chemist, Sutton, Surrey.

ASSISTANT, of good appearance and address, wanted for the front counter; outdoors; no Sunday duty. Apply, stating age, salary required, and full particulars, to G. C. Dusart, 16 Robertson Street, Hastings.

INVOICE Clerk wanted; must have a thorough knowledge of the Drug Trade, and be a good and quick writer. Address, stating age, salary required, and last employ, to "Radix," care of Messrs. Street & Co., 30 Cornhill, E.C.

WHOLESALE Druggists.—Wanted at once, Foreman for Finishing Counter; also Wet Counterman; both must be active, reliable men. State age, experience, salary, &c., to F. 246, care of Messrs. Deacon, Leadenhall Street.

JUNIOR, in a Mixed Country Business (middle of June); passed Prelim. and able to take the shop, principal being engaged in another department; hours short; home comfortable; abstainer preferred. J. Cripps, Reepham, Norfolk.

AT once, Junior; age about 20 or 21; abstainer; one only kept; no time can be spared for study; hours 8 till 10, and alternate Sundays from 6 till 10. Apply personally, or with carte, to Mr. Taplin, 91 Hampstead Road, N.W.

A YOUNG Man used to entering drug orders; must be quick, accurate, and a good writer. Apply, by letter only, stating qualification and salary required, to Hodgkinson, Prestons & King, 81 Bishopsgate Street Without, E.C.

IMMEDIATELY, for a Light Retail and Dispensing, in a fashionable watering-place, N. Wales, a smart man as Manager for a Branch. Apply personally to Messrs. Hewlett & Son, Wholesale Druggists, 40, 41 and 42 Charlotte Street, E.C.

INVOICE Clerk wanted by Wholesale Drug house, in Scotland; must be good penman, quick, and accurate; character must bear strict inquiry. Apply, with references and full particulars, to Messrs. Keith & Co., George Street, Edinburgh.

WANTED, a gentlemanly and thoroughly competent Assistant and Telegraphist (single needle); understanding also Postal Counter work; unexceptionally comfortable home offers to a suitable applicant. Apply, Postmaster, Buntingford.

THOROUGHLY competent Clerk wanted, capable of managing Office of Export Druggists; must have had good all-round experience, and produce first-class references. State full particulars and salary required, to L 329, Messrs. Deacon's, Leadenhall Street.

WANTED, an active, trustworthy Assistant; abstainer and member of a Christian Church. Apply, stating age, experience, and salary, in or outdoor (photograph if convenient), to "Park," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a qualified Assistant for Kobe (Japan); must be a thorough good business man, and understand manufacturing aërated waters; one with capital can have share in business if desired; climate and scenery finest in the world. Apply, Maw, Son & Thompson, London.

WANTED, for a Mixed Country Business, a fully qualified and experienced Assistant; must be gentlemanly, a good Salesman, and of active and energetic habits; references unexceptionable. Apply, with fullest particulars, to Gurney, Messrs. Herring & Co., 40 Aldersgate Street, London.

MINERAL Water Factory.—Foreman wanted, with first-class experience and a thorough knowledge of the manufacture of all kinds of aërated waters. Applicants must give full details of their experience, state references, age, and wages required, to M. P., care of Messrs. Street & Co., 30 Cornhill, E.C.

METROPOLITAN Hospital, Kingsland Road, E.—Assistant Dispenser wanted; candidates must be either members of the Pharmaceutical Society of Great Britain or Associates of the Apothecaries' Society of London. Applications, with copies of testimonials, to be sent in on or before Monday, 20th May, to Charles H. Byers, Secretary.

WANTED, competent trustworthy Assistant (outdoors), a married man preferred, for Light Dispensing Business; must be competent to take full charge when Proprietor is absent, and able to Prescribe; state height, experience, and salary required, and enclose photo. E. Marriott & Co., Dispensing and Homœopathic Chemists, Hastings.

SENIOR Assistant, indoors (May 27); qualified; for a first-class Retail and Dispensing Business; age not under 26; must be quick, and a thorough man of business; one who is well up to the present style of pushing trade. Apply, stating full particulars, references, &c., enclosing carte (to be returned), E. Michell-Smith, Chemist, Weymouth.

WANTED immediately, a qualified out-door Assistant, to take entire charge of Branch Business in Cambridgeshire; one used to general country trade and Prescribing; first-class references required; one seeking a permanency preferred. Apply, stating age, experience, salary required, with photo if convenient, to C. Boultbee, Sutton, Isle of Ely.

A CHEMIST (non-resident) in N. London wishes to meet with a married man about 40, employed in wholesale drug house or otherwise during the day, who would reside on the business premises, assist in the evening, and occasionally take charge; terms to be mutually arranged. Address, X. Y. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, for London, a qualified Assistant, of good address and experience; accustomed to first-class Dispensing; good counterman indispensable; capable of taking management in the absence of the principal, and willing to make himself generally useful; personal interview preferred. Reply, K.E., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED in June, for a large city, an energetic experienced Manager, of middle age, willing to take an active part in a first-class Dispensing and Retail Business; to a suitable person a good salary will be given, with a furnished house, coals, and gas; it is essential he should be a good bookkeeper, and provided with good security and unexceptionable references. Reply to "Alpha," care of Gravatt's, 11 King Street, Cheapside.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

TRAVELLER; 4 years' experience; good references. C. C., Post Office, Winchelsea.

AS Assistant; 24; height 6 feet; good experience; Minor. J. Goodwin, Ansley, Atherstone.

JUNIOR (sea-coast); aged 24; good experience. E. T., 19 Avenue Road, Hackney Downs.

JUNIOR, in or near London, with time for study; good reference. W. Argles, Aylesbury.

DISPENSER, Chemist, Surgeon, or Public Institution; good testimonials. E. R., 35 Bond Street, Swansea.

TEMPORARY; aged 25; Apothecaries' Hall qualification; disengaged. "Chemicus," 52 Harrow Road, Paddington.

WHOLESALE.—Wot Counter, or Traveller; over 8 years' experience; highest references. R. B., 182 Southwark Park Road.

AS Improver; 21; 4 years' experience; passed Preliminary; abstainer; good references. P. B., 22 Thorpe Road, Norwich.

AS Assistant; 6 years' experience, London and country; disengaged early in June. Parry, 1 King David Lane, Shadwell, E.

AS ASSISTANT; qualified; good experience in Dispensing and Retail business. "Chemist," 71 Palmerston Road, Wimbledon.

JUNIOR or Improver in good Retail and Dispensing business; Midlands preferred; good references. Evans, c/o Thornton, Redditch.

PART Time; Assistant or Dispenser to Surgeon; 8 years' experience; good references. "Chemicus," 27 George Street, Worcester.

WHOLESALE or Retail; good reference; aged 20; height 5 ft. 9 in.; 5 years' experience. "Honeybun," 73 Wendover Road, N.W.

DISPENSER or Improver; 19; 4 years with Surgeon; had shop experience; abstainer. A. B., 98 West Street, Boston, Lincolnshire.

AS Assistant; can prescribe and extract teeth; aged 26; height 5 feet 6 inches; town or country. "Chemist," 35 Trinity St., S.E.

ASSISTANT; good experience; aged 23; highest reference; disengaged. "Statim," 32 Rocester Street, Queen's Park, Manchester.

BRANCH Manager or Senior; Dispensing, Retail, and Prescribing experience; qualified; good references. "Delta," 389 High Street, Cheltenham.

ASSISTANT Manager; good Dispenser, Prescriber, and Counterman; good-class business; experienced. H. A., 1 St. Mary's Square, Paddington, W.

ENTIRE Management of Country Business; qualified; good prescriber; 30 years' experience; 35*s.* per week, outdoors. A. Z., 458 Mile End Road, London, E.

MR. S. SMITH, 7 Upper Montague Street, Bristol, takes Confidential Management during absence or illness, or Branch; varied experience; distance no object.

LOCUM-TENENS; experienced; abstainer; good references: duty conscientiously discharged. "Veritas," 10 Bond Street, Higher Broughton, Manchester.

BRANCH Manager or otherwise; good experience and references; successful as Branch Manager; qualified. W. S. J., Mr. Langhelt, Addington Street, Ramsgate.

TEMPORARY; experienced Assistant requires engagements for approaching holidays; excellent references. A. W., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER (32), large connection Chemists, Doctors, Vets., wants engagement; good references and security. 278/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO Manufacturers, &c.—Influential experienced young man, leading Drug and Sundries house, Dublin, open to represent above in Ireland; direct reference; security. "Agent," care of Mr. West, 13 College Green, Dublin.

LOCUM-TENENS.—Qualified Chemist, good experience, appearance, and address, will be glad to communicate with gentlemen desirous of taking holiday this summer; any part. "Scilla," Mr. Froeman, Long Stanton, Cambs.

TO Manufacturers and Wholesale Houses.—A Gentleman is desirous of representing a good firm as Traveller; energetic and indefatigable in business; unexceptionable references. W. E., Mr. Ward, Chemist, 136 South Street, Sheffield.

TO Manufacturers and Wholesale Houses.—Engagement desired as Drug Traveller, to work Scotland and the South-West grounds; disengaged in June. Apply, "Traveller," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A YOUNG man, aged 21; Protestant; tall; good appearance; quick; good server; speaking English and French fluently; requires a place as Improver; would be satisfied with board for the first six months. Miss C., Evington Place, Ashford, Kent.

A GERMAN Druggist, speaking French fluently, and experienced in German and French dispensing, the Drug trade, correspondence, &c., requires a situation in England in July; aged 22½; excellent references. Address, G. Kurze, Elève en pharmacie, Audincourt (Doubs), France.

TO Manufacturers and Wholesale Houses.—Experienced Traveller, just resigning agency for a specialty, is desirous of representing a good firm in sundries, &c.; calling on chemists, druggists, grocers, and stores, London and suburbs. Address, J. W. K., 28 Windsor Road, Holloway, N.

A CHEMIST desires to place his son as Improver, in a good active business, for about 2 years; good address and about 1½ years at business; passed Preliminary; suburbs of London or a good provincial town, with some time for study. Apply in first instance, Messrs. Barron, Harveys & Co.

YOUNG Lady desires employment as Clerk; 8 years' office experience, and has been for a considerable time employed in the office of a large firm of wholesale druggists and manufacturing chemists; certificated bookkeeper; good knowledge of French; excellent references; [illegible] salary. Address, R. D., 36 Blakesley Street, Commercial [illegible]

MANAGER, Branch or Department; qualified by exam.; aged 39; married; two children, youngest 9 years; experienced Prescriber; industrious, strictly reliable, and sober; excellent testimonials, two from gentlemen whose businesses were satisfactorily managed until sold; Continental, London, Brighton, and agricultural experience. Mr. Keeley, 75 Hill Street, Peckham, London.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

BURNT MAGNESITE POWDER and TRIPOLI of every kind, f.o.b. Stettin, cheap. Bruck's Gruben Comtoir, Berlin, S.O.

MECHANICAL DENTISTRY.

FIRST-CLASS work done for the profession; specimens for show-cases in Vulcanite and Plate at reduced rates. Send for price-list to F. J. Phillips, 62 Dorset Street, Hulme, Manchester.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1*s.* How to Write an Essay, 3*d.* Cæsar Simplified, 1*s.* Knotty Points in Latin Grammar, 1*s.* 6*d.* MINOR.—Equations Simplified, 1*s.* Illegible Autographic Prescriptions, 1*s.* Notes on Dispensing, 1*s.* Prescriptions given at the Minor, 6*d.* "Chemist," care of Mr. J. Edwards, Wye, Kent.

STIRLING'S 'MINOR" AIDS.

Organic Materia Medica. Concisely tabulated, thus saving much time and laborious reading. Post free, 1*s.* 1*d.*; cloth gilt, 1*s.* 7*d.*
Notes on Dispensing. 3rd Edition. Post free, 1*s.* 1*d.*
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Doses, Sp. Gravities, and Percentages of B.P. 1885. Vest pocket edition. Post free, 6*d.*
Sold by H. KIMPTON, 82 High Holborn. All orders *by post* should be addressed to the Publisher—

GOWER, 4 Lancing Road, Ealing, London (*late of Hackney*).

CHEMISTS, CORONERS, AND THE SALE OF CHLORAL.

Vide CHEMIST AND DRUGGIST, March 30, page 419.—Chemists would do well to relieve themselves of all moral and legal responsibility by supplying Hunter's Solution of Chloral when asked for Sleeping Draughts, &c.

ROUSE, WIGMORE STREET, LONDON, W.

Just published, demy 8vo., 46 pp., price Sixpence.

THE FUTILITY OF EXPERIMENTS WITH DRUGS ON ANIMALS.

By EDWARD BERDOE, L.R.C.P., M.R.C.S., &c.

"In this compilation Mr. Berdoe has seized on a remarkable number of absolutely contradictory inferences which have been drawn by physiological investigation from experiments conducted with similar drugs, and which, to justify their scientific character, ought to have yielded similar results . . . Experiments on animals conducted by theorists, or by men who are seeking to get their names known in medical literature, are only likely to lead us further astray from medical knowledge than we shall ever go by the old and sound methods."—*The Chemist and Druggist.*

London: SOCIETY FOR THE PROTECTION OF ANIMALS FROM VIVISECTION, 20 Victoria Street, S.W.; Swan Sonnenschein, Lowrey & Co., Paternoster Square; and all Booksellers.

£20

TOBACCONISTS COMMENCING.

Write for Illustrated Guide, "How to open respectably, £20 to £1,000," post free. "Tobacconists' Outfitting Co.," 11 Beech Street, London, E.C. The largest and oldest complete Tobacconists' Furnishers in the world. [illegible] years.

CAUTION!

WARNER'S "SAFE" CURE.

In the High Court of Justice, Chancery Division.

H. H. WARNER & COMPANY *v.* J. WARNER.

NOTICE IS HEREBY GIVEN that on the 1st day of March, 1889, Mr. Justice Stirling ordered that the Defendant, his servants, and agents, be restrained until Judgment in this action, or until further order, from selling, or advertising, or offering for sale, any medical preparation not of the Plaintiffs' manufacture, so as to lead to the belief that the said preparations are the goods of the Plaintiffs.

The Defendant having appealed from this decision, the Lords Justices of Appeal on the 20th day of March, 1889, confirmed the order of Mr. Justice Stirling, and dismissed the Appeal with costs.

Dated this 26th day of March, 1889.

ERNEST SALAMAN, 65 and 66 Chancery Lane.

Acting as Solicitor for the Trade Marks Protection Society.

The attention of Chemists, Medicine Vendors, and the Public generally is called to the above decision and judgment. All similar attempts at imitation and infringement of our rights will be summarily prosecuted.

H. H. WARNER & CO.,

86 CLERKENWELL ROAD, E.C.

SOLE PROPRIETORS

WARNER'S "SAFE" REMEDIES

GERMAN BOTANIC DRUGS

In Press-Bales for Export.

PHARMACEUTICAL TINCTURES

OF EVERY DESCRIPTION.

Lapis Haematites Longus.

BECKER & KIRSTEN,

DRESDEN, GERMANY.

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Gentlemen,—We desire to call your attention to the fact that we are advertising a Specific for Neuralgia called "LETHE," and will be happy to forward you a sample for gratuitous distribution on receipt of card with address.

LETHE. 1/1½. Why is it a success? Because it does what it professes. It is an absolute "Specific" for Neuralgia and pain of every description.

LETHE. 1/1½. Cures a larger proportion of cases than all the other remedies combined.

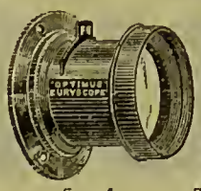
LETHE. 2/9. Has been used in private practice for 15 years, and has an enviable reputation due to its marvellous results.

Yours truly,

W. WRIGHT & CO., 22 Gray's Inn Rd., LONDON.

PERKEN, SON & RAYMENT

MANUFACTURE FOR THE TRADE.



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"Working with such a large aperture (f/6 approx.), it serves as a portrait and group lens, as well as a landscape and copying objective. There is no doubt of its proving a most useful lens."—J. Traill Taylor, *British Journal of Photography.*

5 × 4	7 × 5	8 × 5	9 × 7	10 × 8
63*s.*	94*s.* 6*d.*	110*s.*	126*s.*	220*s.*

"Optimus" Rapid Rectilinear.

5/4	8/5	7/5	8/6	9/7	10/8	12/10	15/12	18/15
33*s.*	45*s.*	49*s.* 6*d.*	64*s.*	82*s.* 6*d.*	127*s.* 6*d.*	142*s.* 6*d.*	180*s.*	225*s.*

"Optimus" Wide Angle Symmetrical.

5/4	7/5	9/7	10/8	12/10	15/12	18/15
39*s.*	52*s.* 6*d.*	82*s.* 6*d.*	127*s.* 6*d.*	142*s.* 6*d.*	180*s.*	225*s.*

"Optimus" Quick-Acting Portrait.

Diam. ..	2 inches.	2¾ inches.	3½ inches.
Price ..	90*s.*	120*s.*	180*s.*
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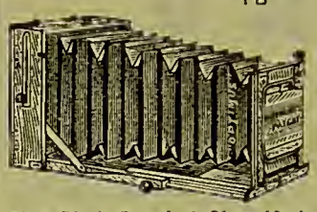

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Rayment's Camera (*Long Focus*).

Price includes 3 Double Dark Slides.

4¼ × 3¼	5 × 4	6½ × 4¾	8½ × 6½	10 × 8	12 × 10	15 × 12
120*s.*	126*s.*	145*s.*	168*s.*	212*s.*	258*s.*	314*s.*

"Optimus" Camera (*Long Focus*).

Price includes 3 Double Dark Slides.

4¼ × 3¼	5 × 4	6½ × 4¾	8½ × 6½	10 × 8	12 × 10	15 × 12
130*s.*	133*s.*	137*s.*	175*s.*	227*s.*	275*s.*	333*s.*

Portable (A.R.) Camera. Compact, Rigid, and of Excellent Finish.

4¼ × 3¼	5 × 4	6½ × 4¾	8½ × 6½	10 × 8	12 × 10	15 × 12
102*s.*	104*s.* 9*d.*	118*s.*	146*s.* 3*d.*	174*s.* 6*d.*	216*s.*	274*s.* 6*d.*

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Including Repeating Frame, Masks, one Single Dark Slide, Rack Focussing, and Swing.

6½ × 6½	8½ × 8½	10 × 10	12 × 12	15 × 15
145*s.*	188*s.*	225*s.*	265*s.*	325*s.*

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By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

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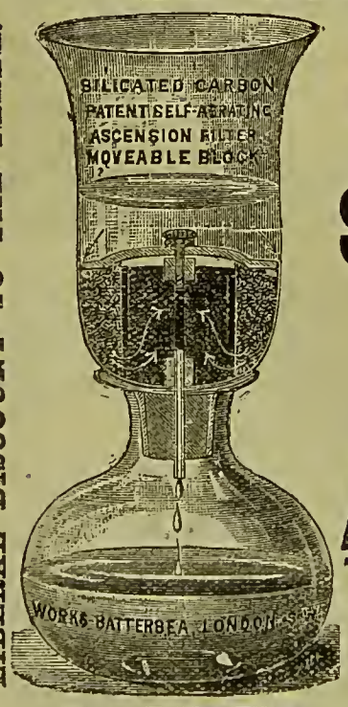

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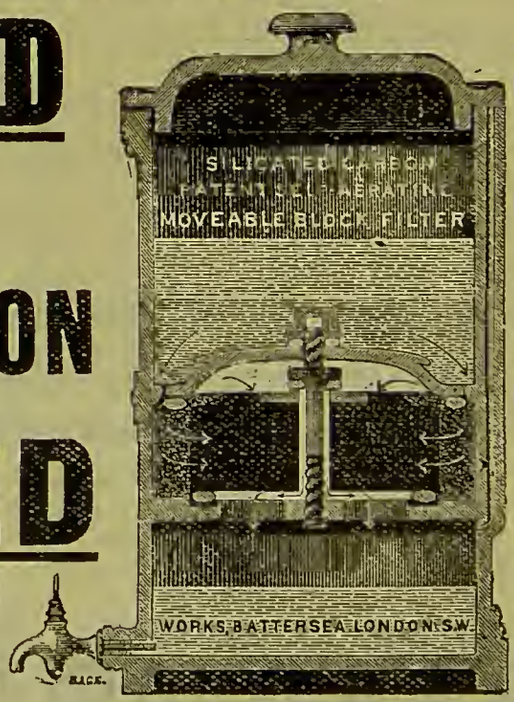

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FOR PRICES AND FULL PARTICULARS, WRITE TO THE

SILICATED CARBON FILTER CO., Battersea, LONDON, S.W.

THE SKIN WITHOUT.

(*With apologies to* SIR A. P.)

There's a skin without, and a skin within,
A covering skin and a lining skin;
But the skin within is the skin without,
Doubled inwards and carried completely throughout.

The palate, the nostrils, the windpipe and throat
Are all of them lined with this inner coat,
Which through every part is made to extend,
Lungs, liver, and bowels from end to end.

The outside skin is a marvellous plan
For exuding the dregs of the flesh of man,
While the inner extracts from the food and the air
What is needed the waste of the flesh to repair.

Too much brandy, whisky, or gin
Is apt to disorder the skin within,
While if dried with *soap*, the skin without
Refuses to let the sweat come out.

Good people all, have a care of your skin,
Both that without and that within;
To the first give plenty of "**Vinolia**" **Soap,**
To the last, little else but water, we hope.

But always be very particular where
You get your water, your *soap*, and your air,
For if these be tainted or rendered impure,
It will have its effect on the man, be sure.

The *soap* which will ever for you be the best
Is one WITH FREE FAT, and that's milled and compressed.
The alkaline soaps and the picture-book soaps
Would ne'er be employed by infallible popes.

Your water, transparent and pure as you think it,
Had better be filtered and boiled ere you drink it,
Unless you know surely that nothing unsound
Can have got to it over or under the ground.

But of all things the most we would have you beware
Of breathing the poison of once-breathed air;
When in bed, whether out or at home you may be,
Always open the windows and let it go free.

With clothing and exercise keep yourselves warm,
And change your clothes quickly if caught in a storm,
For a cold caught by chilling the outside skin
Flies at once to the delicate lining within.

All you who thus kindly take care of your skin,
And attend to its wants without and within,
Need not with "**Vinolia**" feel any fears,
For your skin may last you a hundred years.

VINOLIA itself is a plastic, emollient cream for **Eczema, Pruritus, Piles, etc.**

Prices:—"VINOLIA" (for Eczema, Pruritus, etc.), 1s. 9d. and 6s. per box.
"VINOLIA" SUPERFATTED SOAP (Medical), 2s. per box of 3 Tablets;
"VINOLIA" SUPERFATTED SOAP (Toilet), 2s. 6d. per box of 3 Tablets.

TERMS TO CHEMISTS.

VINOLIA SOAP (Medical), under 1 doz., 20s.; 1 doz. and upward, 18s. 4d.
VINOLIA SOAP (Toilet), under 1 doz., 24s.; 1 doz. and upward, 22s. 10d.
VINOLIA (Small Size), under 1 doz., 18s.; 1 doz. and upward, 16s. 9d.
VINOLIA (Large Size), under 1 doz., 60s.; 1 doz. and upward, 57s. 8d.
VINOLIA for dispensing *compound prescriptions only*, 3s. and 12s. less per dozen on the small and large size respectively.

Agents for BLONDEAU & CIE.:

ROBERTS & CO., 76 New Bond Street, LONDON,

And 5 RUE DE LA PAIX, PARIS.

EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week. Remittances payable to EDWARD HALSE.

TERMS

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of ½d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of The Chemist and Druggist, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as *e.g.*, £1 10*s.* 6*d.*

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6*d.* if the amount is £3 or under; and 1*s.* if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Drugs and Chemicals.

Poppy-heads, 5*s.* per 1,000, bag 6*d.*, sample 3*d.*; crushed 10*s.* cwt. Connor, Doncaster.

Winchester tinct. iodine, 3*s.* lb.; 2 lb. acid. gallic., 3*s.* lb.; 3 lb. bismuth subnit., 6*s.* 6*d.* lb.; 4 lb. tinct. ergotæ, 2*s.* 6*d.* lb.; 4 lb. ol. menth. viride, 11*s.* lb. J. C. Lingdale, Skelton.

Formulæ.

Reliable recipes, 6*d.* each; full set of 130 neatly copied in book, 7*s.* 6*d.*; send for list. "Chemist," Edwards, Wye, Kent.

Set of reliable pills, all now selling successfully, return of outlay absolutely certain: rheumatic gout, backache, tic, blood purifying, liver and digestive, specific bolus for gonorrhœa, V.O. for syphilis; 2*s.* the six; Southall's boats wanted; would exchange for good root-cutter or offer. Johnson, 64 Furness Hill, Sheffield.

Brooke's reliable Recipes.—"Syrup Lemons," from fruit, delicious flavour, brilliant, costs 4*d.* lb.; "Herbalade," best and cheapest herb extract sold, appetising, digestive, keeps well; "Corn Cure," contains iodine, cures after others fail, painless, cleanly, stable; "Spring Blossoms," deliciously enchanting perfume, for local name, inexpensive; "Tic Specific," safe, certain cure for all nerve pains, never fails. Recipes 7*d.* each, 3 for 1*s.* 6*d.*, post free, with full instructions; all warranted practicable preparations in daily sale. List free. Tom Brooks, Chemist, Hornsey, N.

Literature.

Pharmaceutical Journal, posted Mondays, in exchange for *Chemist and Druggist*. Holmes, Brill.

The Chemist and Druggist, without Diaries, from 1881 to 1888 inclusive, complete all but two numbers; what offers? Dunlop, Hull.

Chemist and Druggist, 1887, 1888, 1889, and to end of March, 1890; Diaries, 1887, 1888, 1889; offers wanted, all or part. "Plant," Gorton, Manchester.

Soda-water Machinery

Two large generators and gasometers, complete with pipes, fittings, improved acid tanks, purifiers, &c., cheap. Address, Manager, Chemists' Aërated and Mineral Waters Association (Limited), Bristol.

Shop Fittings.

Drawers, several nests, various lengths; also bent-glass counter cases, desks, dispensing-screens, counters and shop-fittings of every description. Great bargains at Philip Josephs', 54 Old Street, Goswell Road, London, E.C.

Shop-fittings, consisting of wall, counter, tooth-brush, desk, and other show-cases, dispensing-screens, counters, drawers, mirrors specie-jars, carboys, shop-rounds, ointment-jars, pill-machines, marble slabs; also window-fittings, glass shelves, and a variety of other articles; half price; easy payments on hire. Natali & Co., 184 Aldersgate Street (nearly opposite Maw's).

Second-hand.—17 1-gallon and 4 3-quart green carboys, with stoppers, large japanned caps, gold labels, 1*l.* 10*s.*; 1-gallon black upright store bottles, caps, bungs, and gold-labelled, 14*s.* per dozen; 19 ½-gallon ditto, no labels, 10*s.*; 1 31-in. specie jar, ornamental glass cover, ornamental scroll label, 1*l.* 15*s.*; 2 specie jars, coat of arms, gilt tin covers, 26 in., 2*l.* 15*s.*; 2 23-in., Royal arms, japanned covers and mahogany plinths, 4*l.* 10*s.*; 1 30-in., Royal arms, glass gilt covers, 2*l.* 17*s.* 6*d*; 1 30 in., phœnix, 2*l.* 5*s.*; wall glass case, 8 ft. 10 in. by 6 ft., mahogany glazed sashes, shelving, deal grained closets under, mahogany top, 5*l.* 15*s.*; 140 ft. run deal painted shelving, black polished edges, 1*l.* 10*s.*; 6 ft. 9 in. by 4 ft. 3 in. Spanish mahogany glass case, elliptical on plan, cornice, skirting, shelving, sashes with bent plate glass, 12*l.* 10*s.* W. Hawke & Son, Wild Court, Great Wild Street, London, W.C.

Miscellaneous.

Microscope slides, 5*s.* doz., or exchange. Hcury Ebbage, 344 Caledonian Road, N.

Peruvian guano, 10*s.* 6*d.* cwt.; exchange drugs or patents. Hulme, Fenton, Staffordshire.

Microscopic slides for sale, anatomical, pathological, interesting, &c.; lists and samples free. B., 233 Maida Vale, W.

To analysts, laboratory men, students, &c.—Cash offers wanted for Oertling's balance, new and complete in glass, mahogany case, 12-in. divided beam, carries 1,000 grains, and indicates $\frac{1}{200}$ grain, agate mounts, &c. Sneed, Chemist, Keighley.

Bracher's automatic still, copper, B2, cost 2*l.* 10*s.*, 30*s.*; 3 earthenware inhalers, Bourne's fig. 360, 1*s.* each; 12 Lee's bottle-cleaners, 1*s.* 6*d.*; Clarke's adjustable bed-tray, 7*s.* 6*d.*; new, cash or references; several vols. of *Pharmaceutical Journal*, ½-bound, and "Year-Book of Pharmacy"; offers. Rookledge, Easingwold, Yorks.

WANTED.

Halfpenny letter envelopes, any quantity. J. C. Lingdale, Skelton.

Shop-fittings of all descriptions. Particulars to Natali, 184 Aldersgate Street, E.C.

Wall-case, about 8 feet high by 4½ feet broad. "Squire's Companion." Lawrence, Oban.

Shop counter; give full description, lowest price to Jeacock, Chemist, Lowestoft.

Pfeiderer's kneading machine; state size, price and condition. Heald, Burnham, Bucks.

Clater's "Horse Doctor," Hargreave's "Venereal Diseases," latest editions; state price. Williams, Hoyle.

Four window carboys, about 10 or 12 gallon. Apply, Loye & Co., 89 and 90 Treville St., Plymouth.

Some second-hand chemist's show carboys and fittings. Apply, J. O'Shea, 23 Friars' Walk, Cork.

Address Wanted.

Major K. Piper, residing most likely suburbs London; tall, stout, very familiar. Please communicate with De Faye, Chemist, Jersey.

COPIES OF "THE CHEMIST AND DRUGGIST" will be Circulated to Transatlantic Drug Firms on

MAY 18TH, 1889.

The distribution will be a very important one added to the usual circulation of "The Chemist and Druggist" in the United Kingdom, Australasia, and other Countries, and will comprise

ALL THE PRINCIPAL DRUG HOUSES IN THE UNITED STATES AND CANADA

This Issue will contain Reports of the Annual Meeting of the Pharmaceutical Society, Dinner, &c.

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BRANCH OFFICES—MELBOURNE, SYDNEY, AND NEW YORK, U.S.A.

JOHNSON & JOHNSON

NEW YORK and LONDON,

MANUFACTURING CHEMISTS,

MANUFACTURERS OF ALL VARIETIES OF

MEDICINAL AND SURGICAL PLASTERS IN RUBBER COMBINATION

(PERFORATED AND PLAIN), AND ISINGLASS AND MUSTARD PLASTERS.

ALSO MOIST ANTISEPTIC DRESSINGS & ABSORBENTS.

IMPROVED BELLADONA PLASTER.

Increased action by the addition of Boracic Acid and a mild rubefacient, by which the activity of the cutaneous glands is stimulated, and their power of absorption increased.

We have succeeded in greatly increasing the therapeutic value of Belladonna and other Plasters.

FIRST.—By preparing the mass in a manner calculated to promote a more rapid absorption of the incorporated drug.

SECOND.—By employing (in Belladonna Plaster) a more reliable extract of the drug than is commonly used.

The attention of manufacturers of Medicated Plasters has hitherto been directed chiefly toward perfecting the mechanical excellence of their preparations, overlooking, to a certain extent, the real end and aim for which Plasters are made.

The extent to which counter-irritants, solvents, detergents, &c. can be utilised in Plasters to produce a mechanico chemical alteration of the epidermis, thus rendering the skin more absorptive, has been largely if not entirely overlooked.

By the addition of Boracic Acid and a mild rubefacient to the regular Belladonna Plaster formula, several important advantages are secured. The fatty matter in the pores is dissolved by the detersive action of the former, and the glands are expanded and stimulated by the counter-irritative action of the latter, by which means not only is a larger proportion of the medicinal element of the Plaster absorbed, but the therapeutic effect is both increased and more rapidly obtained.

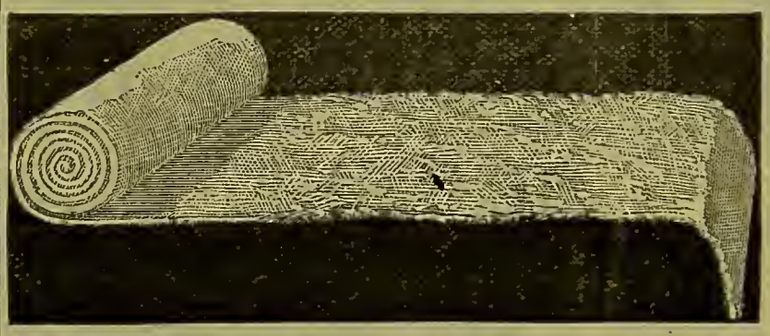
ANTISEPTIC TABLETS.

The increasing demand for antiseptic agents in a convenient form has induced us to prepare Corrosive Sublimate Tablets after the following formula:

Corrosive Sublimate, gr. 7, 3.
Ammonium Chlor. gr. 7, 7.

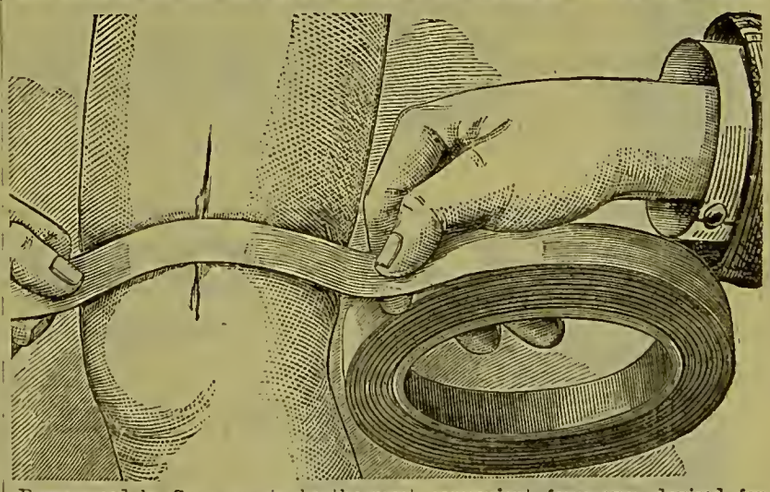
The ammonium chloride is used to make the solution permanent so that the corrosive sublimate will not be precipitated by the organic matter usually contained in water. Each Tablet contains the requisite amount of corrosive sublimate to make a solution of 1-1,000 when added to a pint of water.

ABSORBENT COTTON IN EVEN SHEETS
Rolled with Tissue Paper between them to prevent felting.



Cotton in this form is as easily applicable as an ordinary cloth bandage. Its advantages can be seen at a glance. Supplied in all sized Packets from 1 oz. to 1 pound.

RUBBER ADHESIVE PLASTER on HOLLOW CYLINDERS.



Pronounced by Surgeons to be the most convenient form ever devised for adhesive plaster. Besides its convenience it is much cheaper than rubber adhesive plaster on spools. It is put up in width varying from ½ an inch to 3 inches, 5 yards long, in neatly decorated tin boxes.

Our goods are supplied by all the leading Wholesale Houses in Great Britain and Ireland, also by our

SOLE WHOLESALE AGENTS, H. C. MASON & CO., 1 & 2 AUSTRALIAN AVENUE, LONDON, E.C.

who will be glad to forward Lists and terms on application.

(When ordering through the Wholesale Houses care should be taken to specify the goods of JOHNSON & JOHNSON'S Manufacture.)

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To secure the best Hungarian Aperient Water

DEMAND THE DIAMOND MARK,

And insist upon receiving the HUNGARIAN APERIENT WATER sold by the APOLLINARIS COMPANY (LIMITED), LONDON.

OF ALL DRUGGISTS AND MINERAL WATER DEALERS.

FAVARGER'S SYPHONS

ARE THE

BEST IN THE MARKET.

HEADS PURE TIN,

AND

GUARANTEED FREE FROM LEAD.

GLASS,

FINEST ANNEALED.

SYPHONS.

READ the following:—

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"We beg to say that we have used your "Syphons for many years, and are very well "pleased with them. We have tried other makers "but always found yours superior. We think your "Syphons the best of any we have seen.

"We are, yours truly, H. C. BAILDON & SON."

"Bournemouth.

"We cannot, we think, do better than tell you that of the Syphon "supplied us by you, and used by us during three successive seasons, we have no "had one out of order—if we except two with broken tubes; and only one burst, "and that on first time of filling. The Plating is, we consider, of special excellence "and wears well. We shall not need to look farther whilst you continue to supply us with what "we consider the best value in the market.—Yours truly, J. M. DOWDEN & CO."

PRICES, FULL PARTICULARS, AND TESTIMONIALS, APPLY TO

FAVARGER & CO., 76 TURNMILL STREET, E.C., LONDON

EUGENE GERAUT & CO.

139 & 141 FARRINGDON ROAD, LONDON, E.C.

ALL SELTZOGENES AND SYPHONS,

Previous to being delivered, are tested at a pressure of 240 lbs. per square inch, being double that which they are used at; by this we can guarantee every machine on its leaving our firm.

It must be distinctly understood that all Seltzogenes and Syphons bearing our name are of pure Tin, and made on the PREMISES OF THE ABOVE FIRM, consequently must not be confounded with other cheaper, and inferior foreign goods that may at any time be forced on the market. The ever-increasing demand for our goods convinces us that we are, as hitherto, the leading and largest firm in this class of trade.

Complete with Funnels, Stoppers and directions for using. For order of £5 and upwards Customers can have their Names stamped on Metals free of charge.

SELTZOGENES REPAIRED, REWIRED, & TESTED BY EXPERIENCED WORKMEN.

POWDERS FOR SELTZOGENES AND GAZOGENES.

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PACKING CASE MANUFACTORY AND STEAM SAW MILLS.

ESTABLISHED 1840.

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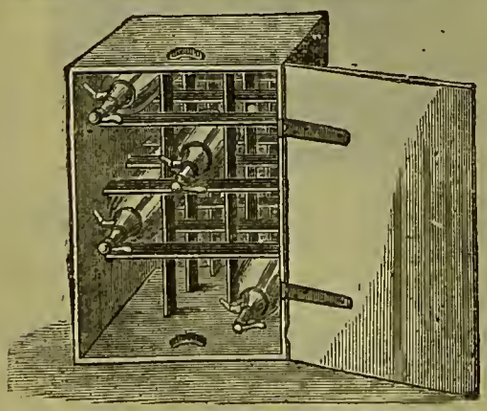

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Cases of every description for Home use and Exportation.

Wine Laths, Oak and Deal.

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Cases Lined with Tin, Zinc, Copper, &c.;

ALSO MANUFACTURERS OF THE

"Acme" Incubator & Poultry Appliances.

PRICE LISTS FORWARDED ON APPLICATION. *EXPORT ORDERS RECEIVE SPECIAL ATTENTION.*

SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED.

SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them **THREE GOLD MEDALS,** which were awarded as follows:—

st—SODA-WATER MACHINERY (Highest Award possible).
st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).
st—PATENT AND ORDINARY BOTTLES (Highest Award possible.)

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

BRATBY & HINCHLIFFE,

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER,

And at 146 MINORIES, LONDON, E.C.

A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER
Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)
Composed of Yarrow, Dandelion, Comfrey, & Horehound.
ENLARGEMENT OF SIZE.
A Sixpenny Bottle makes EIGHT GALLONS of
HERB OR BOTANIC BEER
A NON-INTOXICATING BEVERAGE
Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.
BEWARE of mean and fraudulent imitations.
BEWARE of others copying our title.
MASON'S is the original and only genuine
MASON'S is a Special Compound entirely from Herbs.
NO OTHER EXTRACT MAKES BEER LIKE IT.
Sold in Bottles at 6d., 1/, & 2/ each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.
Ginger, Orange, Lemon, Raspberry, Black Currant, &c.
These are having a very large sale now, and are extensively advertised.
Sold in Bottles at 6d, 1s, and 2s. each.
Quotations on application.

SOLE INVENTORS & MANUFACTURERS: NEWBALL & MASON,
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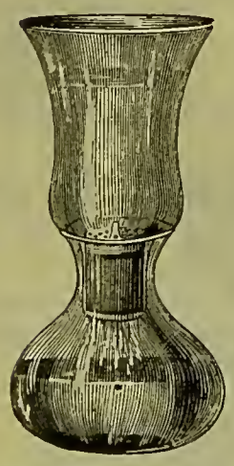
KINMOND'S
Royal Leamington
APNEUMATIC
TABLE WATERS
Were first supplied to H.M. the Queen in 1856, and to H.R.H. the Prince of Wales in 1862.

KINMOND'S
GINGER ALE,
AND ALL THEIR OTHER WATERS,
Are UNRIVALLED for PURITY and QUALITY.
In Ordinary Bottles and Syphons.

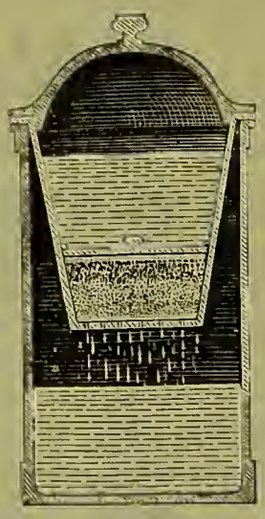
MANUFACTORY—
LEAMINGTON.
Send for Trade List and Compare Prices.

MAWSON'S FILTERS.
(IMPROVED PATENT.)
SPECIALLY SUITED TO WARM COUNTRIES.
THE ONLY FILTERS PERFECTED BY THE AID OF EXACT ANALYSIS.

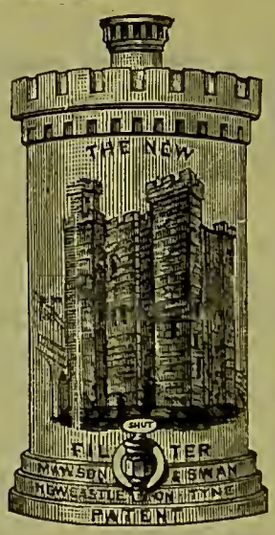
EARTHENWARE.



Plain Glass 4/6
Do., with handle 5/6
(including recharges)



Size— 1 2 3 4 6 gallon.
Price— 14/6, 21/, 27/, 35/, 50/ each.



White, decorated 1 2 4
Earthenware.. 35/ 45/ 65/

Engraved Glass .. 6/6
Do., with handle .. 7/6
(including recharges)

THE ABOVE ARE RETAIL PRICES.
SIMPLE, SAFE, EFFICIENT, EASILY & ECONOMICALLY RENEWED.
Proprietors—MAWSON, SWAN & WEDDELL, NEWCASTLE-ON-TYNE.

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IDRIS & CO.

The Largest Syphon Fillers in the United Kingdom.

SODA. Brilliant, Pungent, and Sparkling.

POTASH. Prepared according to the British Pharmacopœia.

SELTZER. Pure and Delicious Table Water.

LITHIA of guaranteed strength.

LEMONADE. Pure fruity flavour of ripe Lemons.

PURITY. Water filtered by a special process, by which absolute purity is guaranteed. Distilled water used as required. Pure Chemicals only employed. All Goods are regularly subjected to strict analysis.

ELEGANT SYPHONS. Best Block Tin or Silver-plated Tops. IDRIS & Co. make their own Syphons, and can therefore guarantee freedom from deleterious metal.

LOWEST PRICES for Water, both in Syphons and Bottles. Write for Price List.

PROMPT DELIVERY by our Vans in London and Suburbs. Customers called on regularly once or twice a week. Country orders despatched same day as received.

IDRIS & CO. now supply a larger number of the London Hospitals, Public Institutions, and Chemists, than any other Manufacturers, which is in itself a sufficient guarantee of the excellence and purity of the Waters supplied by them.

"I have examined the Mineral Waters prepared by IDRIS & CO., and find that in regard to Chemical purity and brilliancy, they are unsurpassable."
JAMES EDMUNDS, M.D., M.R.C.P. Lond., &c.
Medical Officer of Health and Public Analyst to St. James's, London.

IDRIS & COMPANY,

KENTISH TOWN, LONDON, N.W.

TO AERATED WATER MANUFACTURERS

HAY'S

SOLUBLE ESSENCES

REGISTERED

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

Honourable Mention: International Food Exhibition, Agricultural Hall, London, Oct., 1880. Gold Medal: Soc. of Arts, Paris, 1883

HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER,
A Pure Essence of the Finest Ginger.
Trade Price 5/ per lb.; 12 lbs. and upwards, 4/6.

HAY'S FORTIFIED ESSENCE OF JAMAICA GINGER,
For First Quality Ginger Ale.
Trade Price 5/6 per lb; 12 lbs. and upwards, 5/.

HAY'S GINGER ALE EXTRACT,
For Second Quality Ginger Ale.
Imparts Pungency, Colouring, great Brilliancy, and an unusually Fine Ginger Flavour and Aroma.
Trade Price 4/6 per lb.; 12 lbs. and upwards 4/.

HAY'S GINGER ALE ESSENCE,
For Third Quality Ginger Ale.
This Essence makes a beverage that is unsurpassed by the so-called finest Belfast Ginger Ale.
Trade Price 9/ lb.; 12 lbs. and upwards, 8/6.

THESE ESSENCES
Have obtained the Highest Testimonials from *all the Medical Journals*, and from the *Principal Trade Journals* in this and other countries.

TRADE MARK

REGISTERED

For ORANGE, VANILLA, and all other Essences, SEND FOR PRICE LIST.

HAY'S HOP ALE ESSENCE,
For the manufacture of the Finest Aërated Hop Ale. This Essence is made from the choicest Hops grown, and is unrivalled for its peculiarly fine Hop Flavour and Aroma. Hop Ale made from this Essence has the full flavour of the finest Hops, and is a really appetising Bitter Beer.
Trade Price 8/6 per lb.; 12 lbs. and upwards 8/.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS,
No. 1. Highly Concentrated.
Trade Price 8/6 per lb.; 2 lbs. and upwards 8/.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS,
No. 2. Makes an exquisitely fine Lemonade.
Trade Price 6/6 per lb.; 12 lbs. and upwards, 6/.

HAY'S LEMON FLAVOUR.
Imparts to Lemonade all the Fine Aroma and Flavour of the choicest Lemons.
Trade Price 5/ per lb.; 12 lbs. and upwards 4/6

HAY, HAY, HAY, MANUFACTURING CHEMIST BEVERLEY ROAD HULL

A GOOD LINE FOR CHEMISTS.

The Proprietor will forward, carriage paid, on receipt of Postal Order, 4*s*, 1 dozen 6*d*. bottles of this Popular preparation for making

HERB BEER,

together with One Thousand Pictorial Handbills printed in colours on fine tinted paper, being a series of 16 copper-plate views of scenes from the famous "Dukeries" of North Notts. These Handbills are a high-class example of the printer's art, and are retained by the public for the beauty of the pictures, and thus cause a demand for the preparation wherever introduced. This exceptionally favourable offer can only hold good until 31 May, 1889.

Adam's Extract of Herbs.

The Proprietor is induced to make this offer that the preparation may become more widely known in parts where it has not yet been introduced, his experience showing that where once known and used a large demand has been created and maintained. Chemists who are alive to the requirements of the times will see that it is greatly to their advantage to keep this well-known Extract, rather than be at the trouble and expense of putting up a preparation themselves. Customers' names printed on the handbills. Specially favourable terms for larger quantities may be obtained from the Proprietor,

MANSFIELD, NOTTS.

Adam's Extract of Herbs.

Adam's Extract of Herbs.

MERCHANTS, SHIPPERS & AGENTS

INDENTORS SHOULD SPECIFY OUR MANUFACTURE.

INDENTORS SHOULD SPECIFY OUR MANUFACTURE.

Our Preparations are SPECIALLY Manufactured to meet the Requirements of the EXPORT TRADE.

"PREMIER BRAND"

ESSENTIAL OILS.

Concentrated Fruit Essences—Soluble

MANUFACTURED BY

JOHN CUMMOCK

Who has received Hundreds of Unsolicited Testimonials, also THREE GOLD MEDALS, besides other Honours.

Chemists manufacturing their own Aërated Drinks should write for Prices and Samples of the following:—

ESSENCE "SPARKLING LIMETTA"—Soluble "Essence of Lemon"
ESSENCE "LEMON SQUASH"—Essence for Sherbet
ESSENCE "TONIC HEADING"—Essence for Ginger Ale

AND COMPARE WITH OTHER MAKERS.

Manufactory & Offices: **45 ROPE WORK LANE, GLASGOW.**
LATE 32 MAIN STREET.

ONLY PRIZE MEDAL

LONDON. 1881

TELEGRAPHIC ADDRESS RUBINE, LONDON

HIGHEST PRIZE MEDAL

BRADFORD 1882.

PURE WATERS

GOOD AËRATION

CHEAP PRICES

PURE TIN TOPPED OR SILVERED SYPHONS

CHEMISTS' & HOSPITALS ONLY SUPPLIED

PROTECTION FROM COMPETITION OF STORES, GROCERS, WINE MERCHANTS &c.

PRICES & SAMPLES OF SYPHONS OR BOTTLES SENT FREE

THE CHEMISTS' AËRATED AND MINERAL WATERS ASSOCIATION LIMITED.

45 GIFFORD ST. LONDON. MONTPELLIER WORKS, STARBECK, HARROGATE. SUN FACTORY, BRISTOL

JEWSBURY & BROWN'S

(MANCHESTER)

SPARKLING TABLE WATERS,

UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.

SELTZER WATER.

POTASH WATER.

LITHIA WATER.

SIMPLE AËRATED WATER.

LEMONADE.

GINGER ALE.

QUININE TONIC.

GINGER BEER.

HOREHOUND BEER

EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."
FRANCIS JONES, F.R.S.E., F.C.S.

"On the whole, I have no hesitation in stating that your Aërated Waters are of the highest standard of purity which is practically attainable."
LOUIS SIEBOLD, F.I.C., F.C.S.

"The Lemonade is, for flavour and general excellence, superior to any similar compound which I have examined, and contains no acid but *Citric Acid*.

"I took a sample of the water used in your manufactory, in the preparation of the Aërated Waters, and found it, as was the case with the completed compounds entirely *free* from lead, copper, *or any injurious* matter whatever."
C. ESTCOURT, F.C.S., F.C.I.

& B.'s Syphons are mounted with PURE BLOCK TIN, thus ensuring absolute immunity from dangerous metallic contamination.

CARRIAGE PAID AND ON RETURNS.

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.

ESS. LEMON

(NEW CROP)

Direct from the Manufacturers!!

FOR very many years past we have been able to offer to the Trade Essence of Lemon of exceptional quality, such as could not be obtained through other sources.

Two members of our firm, at various periods, have spent considerable time in the country of its production, in order to arrange for its being made especially for us. In fact, some twenty years ago, when we first introduced our "Speciality" quality, good Essence was unknown in the English Market. We have, however, never ceased studying the question of how we might still improve our position in this article, and have at last decided to **MANUFACTURE IT OURSELVES ON THE SPOT!** It is our pleasure therefore to be able to announce to our friends, and the Trade generally, that we have established works in Messina, Strada Antico Cemitero, for the manufacture of Essences Lemon, Orange, and Bergamot, and that we have already commenced operations; our Mr. A. W. BUSH is now in Messina superintending the manufacture.

We are now placed in the **unique position** of being able to offer the above Essences **absolutely pure,** and **guaranteed made from the finest** selected fruit only. We shall, of course, also continue to offer good commercial qualities as heretofore. We have received advices of first shipments, and any orders entrusted to our care can be forwarded immediately on arrival.

We take this opportunity of mentioning that Ess. Lemon made from the early fruit is superior to that made from the fruit gathered later in the season. We should therefore advise our friends to make contracts for forward delivery immediately, for in such cases we shall be able to hold the early Essence in stock for them.

In consequence of our Branch Establishment in Messina we shall be exceptionally well placed; and, although the market for new Essences is in no way easier, still, by reason of our position we have been enabled to make **AN IMPORTANT REDUCTION IN OUR PRICES.**

Our advices state that the market is very firm for all Essences, and a rise in prices probable, we should advise our friends to make contracts early. Should any of our clients desire it we can execute orders direct from our works in Sicily.

W. J. BUSH & CO.

ARTILLERY LANE, LONDON.

JAMES VIDIE ET FILS,

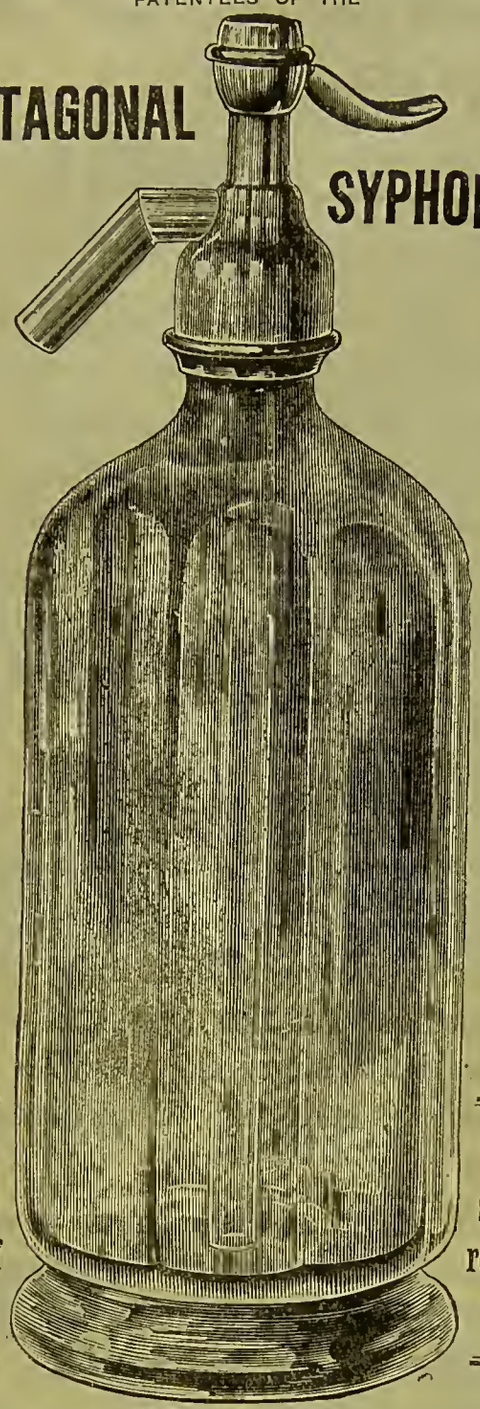
Pantin Glass Works,

PATENTEES OF THE

OCTAGONAL SYPHON.

The "Octagonal" is externally similar to the ordinary Syphon, the interior being blown of an octagonal shape by a new patent process.

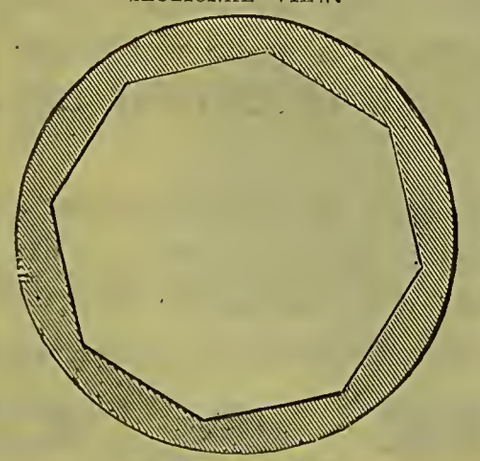
Gives a most brilliant and sparkling appearance to the contents, and can resist double the pressure of ordinary Vases. Greatly recommend our new tint, "AZURE BLUE," which is the best tint for Syphon Vases.



Sample sent on receipt of 2/-

Sample sent on receipt of 2/-

SECTIONAL VIEW.



TO BE HAD OF ALL MINERAL WATER ENGINEERS.

TO BE HAD OF ALL MINERAL WATER ENGINEERS.

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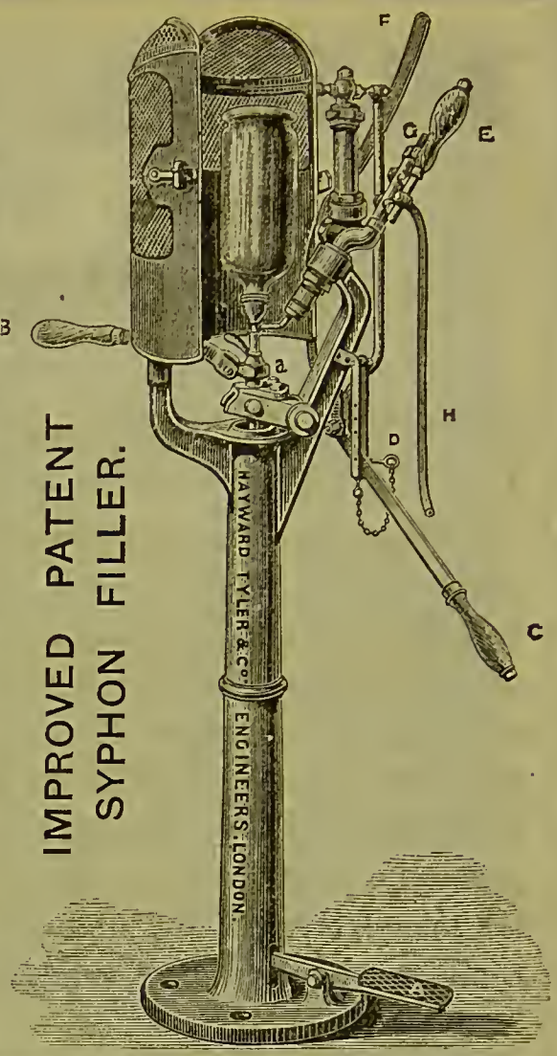
20

HAYWARD TYLER & CO.

84, 85 WHITECROSS STREET, LONDON, E.C.

IMPROVED PATENT SYPHON FILLER.



"CYMRY AM BYTH."

"ABSOLUTELY PURE."

REGISTERED.

ELLIS'S RUTHIN WATERS.

ASK FOR ELLIS'S.

CAUTION.—Corks branded "R. ELLIS & SON, RUTHIN." Every Label is Registered, and bears Name and Trade Mark (Goat on Shield).

SOLE ADDRESS—R. ELLIS & SON, RUTHIN, NORTH WALES.

London Agents: W. BEST & SONS, Henrietta Street, Cavendish Square.

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No. 1, 12/6. **FOR THICK LIQUIDS.** No. 2, 18/6.

Used Extensively by Manufacturing Chemists and Druggists.

Sent Carriage Paid on receipt of Postal Order or Cheque for 12/6 or 18/6.

FILTERING CLOTHS OF EVERY DESCRIPTION.

ANDREWS'

FILTER CLOTH CO.,

330 High Holborn,

LONDON, W.C.

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6*d.*, 1*s.*, and 2*s.* each

GOODALL'S BAKING POWDER.

The Best in the World. 1*d.* Packets; 6*d.*, 1*s.*, 2*s.* and 5*s.* Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1*d.* Packets; 6*d.*, 1*s.*, and 5*s.* Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2*d.*, 6*d.*, and 1*s.* each

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6*d.* and 1*s.* each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6*d.*, 1*s.* and 2*s.* each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3*d.* and 6*d.*

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For Painting Stoves, Grates, Iron, Tin, &c. 6*d.* and 1*s.* Bottles

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A Rich and Lasting Perfume. Bottles, 1*s.*, 2*s.*, and 5*s.* each.

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For Polishing and Cleaning all Metals. Boxes, 6*d.*, 1*s.* and

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In ½- and 1-pint boxes, 3*d.* and 6*d.* each.

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PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

BY SPECIAL APPOINTMENT TO H.R.H. THE DUKE OF CONNAUGHT AND THE ROYAL FAMILY.

BOURNE WATERS.

THE PUREST IN ENGLAND.

R. M. MILLS & CO., BOURNE, LINCOLNSHIRE,

MANUFACTURERS OF

SODA, POTASH, LITHIA, AND SELTZER WATERS, LEMONADE, AND AROMATIC GINGER ALE.

4-dozen and 6-dozen Cases Carriage Paid.

Special attention is invited to our manufacture of

LITHIA WATER.

Each Bottle contains an average dose of Carbonate of Lithia—the recognised Specific for Gout.

THE LATEST SPECIALITY—the Celebrated Artesian Bourne Water in Pints and Quarts for Table Use.

Prices and Pamphlet on application. *Agents appointed.*

Messrs. INGRAM & ROYLE, 52 Farringdon Street, Wholesale Agents for the sale of our Waters.

DAHL'S DYSPEPSIA CAKES,

For Indigestion and Constipation, 1*s.* and 2*s.* 6*d.* per box.

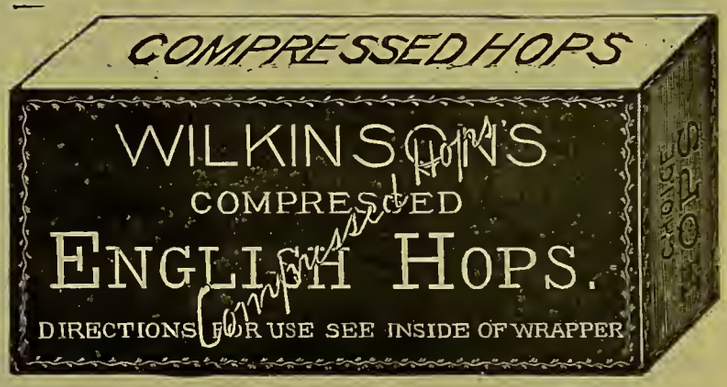
DAHL'S POWDERED CAKES,

For Specially Delicate Cases, 2*s.* 6*d.* per box

THE CHILDREN'S BREAD,

Specially for Children, 2*s.* per box.

DAHL'S AGENCY—41 EASTCHEAP, E.C.



SAMPLES AND PRICES ON APPLICATION.

Address, **A. WILKINSON & SONS,**
37 CANNING PLACE, LIVERPOOL.

TARTARIC ACID

Technically Pure, in Crystals and Powder, of best quality only; also Chemically Pure;

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IN NIENBURG a. d. WESER.

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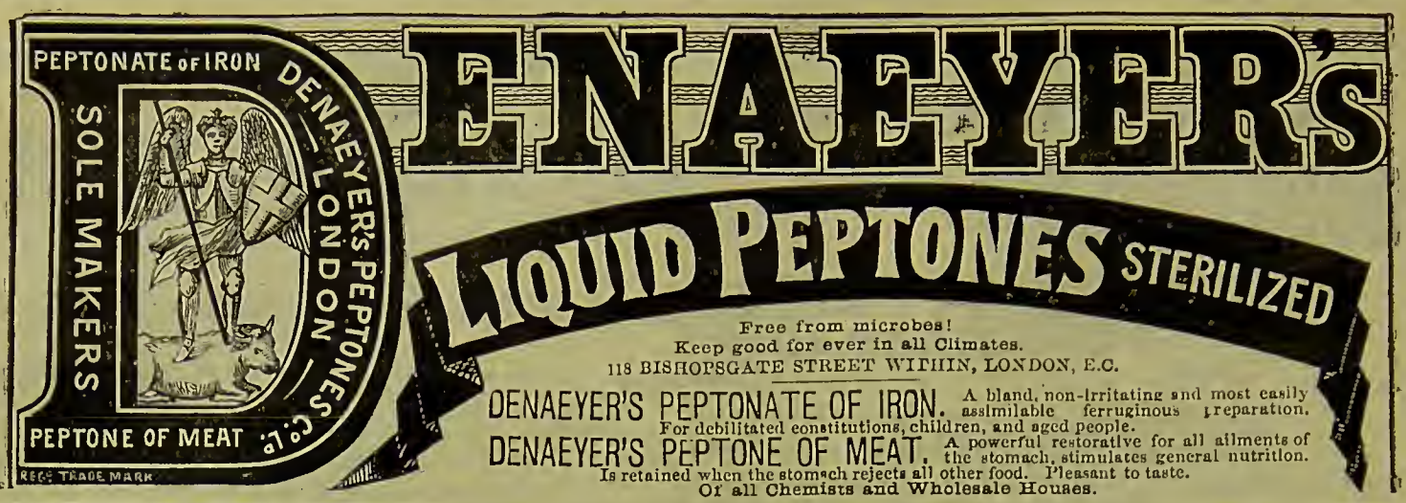

BOVRIL

IN THE "LANCET" OF NOVEMBER 11, 1865, BARON LIEBIG SAYS:—

"Were it possible to furnish the market at a reasonable price with a preparation of meat, combining in itself the albuminous together with the extractive principles, such a preparation would have to be preferred to the Extractum Carnis, for it would contain all the nutritive constituents of meat." Again—"I have before stated that in preparing the Extract of Meat, the Albuminous principles remain in the residue, they are lost to nutrition, and this is certainly a great disadvantage."

"**BOVRIL**" contains the albumin and fibrine in the most perfect possible form, and to those who know the requirements of the human system and the constituents of food, it will be apparent that this albumen and fibrine is identical with what the body requires for recuperation, and that as a perfect form of concentrated nourishment it must supersede any animal aliment at present known.

"**BOVRIL**" has solved the problem of the great German Chemist.

"**BOVRIL**" is Baron Liebig's ideal realised.

OFFICES:—30 Farringdon Street, LONDON.

HASSALL'S LIEBIG'S

EXTRACT OF MEAT AND MALT WINE,

Made of Choice Port Wine, Liebig's Extract of Meat and Extract of Malt.

ARTHUR HILL HASSALL, M.D., London, and E. GODWIN CLAYTON, F.I.C., F.C.S., say:—"The results of our Analysis have been of a very satisfactory character, and we are enabled to pronounce this a valuable and very good preparation, possessing an agreeable vinous flavour. The amount of combined phosphoric acid present is large, and the valuable characteristic constituents of Extract of Meat, in combination with Port Wine of good quality, and Extract of Malt."

WM. COURTNAY, M.D., &c., Medical Officer. Nenagh Disp. (late Resident Surgeon, St. Michael's Hospital, Kingstown, Nenagh, County Tipperary) says:—"To those requiring a nutritious and palatable food, its strengthening and tonic qualities are really good."

J. HALL WOODS, L.R.Q.C.P.I., &c., Penzance, says:—"It is a beautiful preparation, and commends itself alike to both medical man and patient, as a valuable stimulant and food. Combined with pepsine, the results obtained in many cases of 'Dyspepsia' is highly satisfactory."

Cost of Retail Wine Licence will be allowed on a 6-dozen order. Supplied in bulk at greatly reduced prices. Special arrangements made to supply the Wine in Bottle, with attractive Labels, Circulars, and Handsome Framed Show Cards, with Buyer's own name upon same, free of charge. List of Testimonials, copy of Analysts' Reports, and Trade Prices and Samples free on application.

HASSALL & CO., MANCHESTER; BARCLAY & SONS, LIM., & J. SANGER & SONS, LONDON.

MILK IN POWDER

PREPARED BY THE SWISS MILK CO., ST. GALL, SWITZERLAND.

UNSWEETENED OR SWEETENED.

The cheapest, purest, and most nutritious of all similar productions.

The Lancet says:—A very interesting and valuable preparation.

British Medical says:—The preparation represents the highest possible degree of concentration which can be obtained, and is sure to be appreciated.

The Medical Press says:—A milk which is with difficulty distinguished from fresh cow's milk.

London Office, 61 Mark Lane, E.C.

ROBINSON'S
LIEBIG'S BEEF WINE.

Composed of Liebig's Company's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various **Beef Wines** I have had occasion to examine, none have **equalled** as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to **Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.**

WILLIAM ELBORNE, F.C.S., F.L.S.,
Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).
December 15, 1888.

Wilton Fever Hospital, Salford, September 2nd, 1888.

Dear Sir,—I am in receipt of the samples of **Meat Wine** you sent to me. I was so pleased with the results obtained from it that I have obtained a further supply, and have given it a rather extensive trial. I have found it invaluable as a medicine in the treatment of Enteric and Scarlet Fever sufferers from these diseases rapidly improving in strength and weight under its influence. I think the combination a very happy one.

I am, dear Sir, faithfully yours,
To B. ROBINSON, Esq. JOHN MULLEN, Resident Medical Officer

PREPARED ONLY BY

BENJAMIN ROBINSON, THE LABORATORY, PENDLETON, MANCHESTER.

N.B.—A Sample Bottle sent FREE on receipt of Professional or Business Card.

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), **GINGER, RAISIN, COWSLIP, CHERRY, &c.**

A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

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Branch Establishment:
15 PRINCE OF WALES' ROAD, NORWICH.

ST. GEORGE'S AND BANK PLAIN, NORWICH.

To the CHEMISTS & DRUGGISTS of the UNITED KINGDOM.

GENTLEMEN,—We beg respectfully to inform you that we have brought out a **LIEBIG'S EXTRACT OF MEAT AND MALT WINE** made with a HIGH-CLASS BRITISH WINE, which can be sold with a Sweets Licence, which costs only £1 5*s*., and can be obtained in SCOTLAND and IRELAND without a Magistrates' Certificate; in England this Certificate is required, but as you will see by the following Extract from a letter received January 17, 1889, from the Inland Revenue Authorities, it is not necessary to wait till the Licensing Sessions to obtain the Licence, but that the Board will, on production of a recommendation of two of the Licensing Magistrates in the district where the Trader resides, be prepared to grant permission for the immediate sale of the Wine.

EXTRACT FROM LETTER:

"*I am directed by the Board of Inland Revenue to acknowledge the receipt of your letter of 11th inst., and to state, in reply, that in cases where a person is desirous of selling Wine not to be consumed on the premises, although the Magistrates' Certificate has not been obtained, the Board would be prepared to consider favourably an application from the Trader to be allowed to sell, pending the next Meeting of the Licensing Magistrates, upon his depositing with the Collector the amount of Licence due, and producing a recommendation in writing from two of the Licensing Magistrates.*"

We offer to pay the entire cost of the Licence where it is not held if an order is sent us for 4 dozen of the 2/9 size, or 2 dozen 2/9 and 1 dozen 4/6; this we will forward carriage paid to any Railway Station in Great Britain.

Over Two Thousand Testimonials have been received from Medical Men, and the Wine has now an immense sale throughout the United Kingdom.

Soliciting your commands, we are, dear Sirs, Yours most obediently,

COLEMAN & CO., LIM.

P.S.—Please note that a Magistrates' Certificate is not required for Scotland and Ireland, and for England permission can be obtained for the immediate sale of the Wine with very little trouble and no expense to you, as we offer to pay the entire cost of the Certificate.

TOWER TEA

A MOST VALUABLE AGENCY.

REGISTERED.

Tower Tea

NOTE. ☛ These Trade Marks appear on every Package.

WHERE VACANCIES MAY EXIST, AGENTS ARE APPOINTED BY

THE GREAT TOWER STREET TEA COMPANY, LIMITED,

5 JEWRY STREET, LONDON, E.C.

TOBACCO

CIGARS & CIGARETTES.

M. & R. PEACOCK,

Tobacco, Cigar, & Cigarette Manufacturers,

KINGSLAND ROAD, LONDON, E.

Special Packed Tobaccos

"ROYAL CHARTER"

AND

"UPPER CRUST."

Sold in Packets only.

Those who deal in these Goods, or intend doing so should write to the above Manufacturers for Price List.

PASCALL'S GOLDEN MALTEX

PATENTED. CONTAINS 25 PER CENT. OF PATENTED.

ALLEN & HANBURYS' MALT EXTRACT.

"A delicious substitute for Cod Liver Oil."—*Vide* Dr. Tanner's Report, and *The Chemist and Druggist*, April 20th.

In 1/- Bottles	9/- per doz.
In 1-lb. Bottles	22/- per doz.
In 1-lb. Tins	20/- per doz.
In 4-lb. Jars (Jars 6*d.*, returnable)	1/6 per lb.

Of all Wholesale Houses, or of the Manufacturer,

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.

CHAS. SOUTHWELL & CO.

"EXCELSIOR" TABLE JELLIES

IN CARDBOARD BOXES.

Flavours—Orange, Lemon, Calves' Feet, Vanilla, Raspberry, and Noyeau.
HALF-PINTS, 1/9 per doz.; PINTS, 3/3 per doz.; QUARTS, 6/- per doz.

WHOLESALE AND EXPORT MANUFACTURERS OF

JAMS, JELLIES, MARMALADES, CANDIED PEELS, BOTTLED FRUITS.

DRIED ORANGE-PEEL FOR DRUGGISTS.

The "EXCELSIOR" JELLIES can be obtained from F. NEWBERY & SONS, 1 & 3 King Edward St., E.C.; JOHN SANGER & SONS, 489 Oxford St., W.; and Messrs. BARCLAY & SONS, LIMITED, 95 Farringdon Street, E.C.; also direct from the Works,

DOCKHEAD, LONDON, S.E.

TYRER'S SAUCES

GOOD VALUE

AND

"BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE.

LARGEST IN THE TRADE.

In Half-Gross Boxes, at 6/6 per Gross.*

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE OR READING SAUCE.

1d. Sample Bottles, dozen parcels ..	..	per gross	5/	extra quality	6/
" " ½ gross boxes ..	..	"	5/6	"	6/
1d. Giant Bottles, dozen parcels ..	..	"	6/	"	8/
" " ½ gross boxes ..	..	"	6/6*	"	8/
¼-Bottles (flat or round), reputed ½-pint	..	"	16/	"	24/
½-Bottles (flat or round), reputed pint	..	"	26/	"	32/
½-pint Imperial Round Stoppered Bottles	..	"	30/	"	36/
1-pint Imperial " "	..	"	50/	"	60/
12½-gallon Casks (casks free).. ..	..	each	20/	"	32/

ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.

A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER,

The "Borough" Ketchup and Sauce Maker,

70 LONG LANE, BOROUGH, LONDON, S.E.

SOOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.
Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.
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JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

BATGER & CO., LONDON,

SOLE MAKERS OF THE

NONPAREIL TABLE JELLY

AND

NONPAREIL BLANC MANGE

IN CARDBOARD BOXES.

Acknowledged to be the best Concentrated Jelly and Blanc Mange in the Market.

FLAVOURS—

Lemon, Orange, Calf's Foot, Vanilla, Raspberry, Strawberry, Noyeau, Black Currant, and Pine Apple.

Half pints, 1/9 per doz.: pints, 3/3 per dozen; quarts, 6/- per dozen.

CORNS. THE UNIVERSAL CORN AND WART PENCIL WARTS.

ROBINSON'S.

THE OLDEST AND MOST SUCCESSFUL.

doz. mounted on a handsome Illustrated Show Card, Retail, 6d. each; Wholesale, 3s. 6d. per doz. It is especially adapted for Export Trade, and may be safely sent to the hottest climates, as each glass tube is hermetically sealed and enclosed in a cardboard case, with full directions for use.
N.B.—The above is exempt from Stamp Duty by permission of the Board of Inland Revenue. Wholesale by all the Patent Medicine Houses, or from

B. ROBINSON, Manufacturing Chemist and Distiller, PENDLETON, MANCHESTER.

"RAMORNIE."

LIEBIG'S Extract of Meat.

As supplied to the War Office.

1-lb. Jars.....per lb.	6/2	.....per doz.	74/0	2-oz. Jars.....per lb.	7/0	.....per doz.	10/6
½-lb. Jars..... "	6/4	..... "	38/0	1-oz. Jars..... "	7/8	..... "	5/9
¼-oz. Jars..... "	6/7	..... "	19/9	½-oz. Jars ..... "	8/0	..... "	3/0

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co and 11 Fenchurch Avenue, E.C. 6 lbs Carriage Free.

DRUGGISTS' CONFECTIONERY.

ROBERT GIBSON & SONS,

Medicated Lozenge Manufacturers,

CARLTON WORKS, ERSKINE STREET, HULME, MANCHESTER,

1 Australian Avenue, London, and 44 Alter Wall, Hamburg.

GIBSON'S SUPERIOR

BOILED SUGARS

Have gained a High Reputation everywhere. **FOR EXPORT TRADE.** They are put up in 1-lb., 2-lb., and 5-lb. Bottles. Packed in Casks or in 1-doz. Cases as required, and delivered F.O.B. at any Port in England. These Sweets are absolutely pure. We specially recommend

Lime Fruit Tablets, Everton Toffy, Mixed Fruit Drops, Cough Drops, Raspberry Drops, Lemon Tablets.

CACHOU PEARLS,

Musk, Rose, Mint, and other Flavours. In 1-lb. White Glass Bottles. Bottles free

COMPRESSED CHLORATE OF POTASH PELLETS,

SACCHARINE PELLETS,

And PELLETS of every description, put up in 1-lb. White Flint Glass Bottles, with Boxwood Top Corks. Bottles not Charged.

HIGH-CLASS LOZENGES

OF EVERY DESCRIPTION.

Chlorodyne Cough Lozenges, Chlorodyne Jujubes, Peppermint Lozenges,

In every variety of size and strength. Curiously Strong, and Multum in Parvo Mints give the utmost satisfaction Medicated Lozenges of Pharmacopœia Strength.

DIGESTIVE TABLETS. VOICE AND THROAT LOZENGES for Singers and Public Speakers.

ORIGINAL SUGAR WORM CAKES

Have an immense sale, both at home and abroad; will keep in any climate, and give entire satisfaction. Put up in Tins containing 3 doz., 6 doz., and 12 doz. cakes.

THROAT HOSPITAL LOZENGES

(As per T. H. Pharmacopœia).

All Lozenges are sent out in 2-lb. and 4-lb. Bottles (bottles free), but allowed for if returned.

PROPRIETARY LOZENGES CAREFULLY PREPARED, STAMPED, AND CUT TO ANY SIZE OR SHAPE.

PRICE LISTS SENT ON APPLICATION.

E. C. RICH COMPANY, Limited, Agents, United States,

AND

Mr. THOS. LAKEMAN, 34 Pitt Street, Sydney, for Australia.

Telephone Number, 1852. Telegraphic Address—CHEMICUS LONDON.

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ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

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Kuhn, B.

PARALDEHYDE
Zimmermann, A. and M.

PATENT MEDCNS
Albert and Co.
Armbrecht, Nelson and Co.
Atkinson and Barber (Infant Preserv)
Barclay and Sons (Limited)
Beecham (Pills)
Beedzler, J., and Co.
Crouch, F. B. (Wafers)
Dahl's Dyspepsia Cakes
Edwards and Son
Evans, Lescher and Webb
Fenning's (Powders)
Goodall, Backhouse and Co.
Holloway (Pills and Oint.)
Kemp, W. H.
Lalor (Phosphodyne, &c.)
Lincoln (Clarke's Mix.)
Mason, W. B.
May, Roberts and Co.
Morton, H. (Powders)
Newbery and Sons.
Oil of Olivet Co.
Powell, A. E. and Co. (Moonseed Bitters)
Roberts and Co. (Foreign)
Sequah (Limited)
Singleton's Eye Ointment
Stedman, J. (Teething Pwdrs)
Swift's Specific Co.
Vogeler, The Charles A. Co.
Warner, H. H., and Co.
Wilson, A. (Bunter's Nervine)
Wright, W., and Co.

PEPPERMINT OIL
Banner, E. R.
Cocking and Co.

PEPSINE, &c.
Burroughs, Wellcome and Co.
Claridge and Co.
Fletcher, Fletcher & Stevenson
Newbery (Ingluvin)
Warner and Co. (Ingluvin)
Zimmermann

PERFUMERY, FANCY SOAPS
Bates, F. W.
Blondeau and Co.
Boehm, F.
Brecknell, Turner and Sons
Bronnley, H., and Co.
Burroughs, Wellcome and Co.
Chesebrough Manufctring Co.
Chiswick Soap Co.
Colgate and Co.
Cook, E., & Co.
Durrant, Geo.
Ewen (Soaps)
Farina, J. M.
Foulkes, W. J.
Gelston, P., and Co.
Giraud Fils
Greensill, T. S., and Son
Mack, H.
Maw, Son and Thompson
Newbery and Sons (Berdoes')
Pears' Soap
Price's Patent Candle Co.
Quelch, H. C.
Rouse & Co.
Salisbury, S. (Lav. Water)
Shipkoff and Co.
Shirley, A. W
Travado, S., and Co.
Treatt, R. C.
Vigis, L.
Violet
Warrick Brothers
Wedlake, M.
West, T. (Okell's Mona)
Woolley, Sons & Co. (Powder)

PEROX. OF HYDR.
Dunn and Co.
Robbins and Co.

PHARM. PREPS.
Allen and Hanburys
Barron, Squire and Co.
Becker and Kirsten
Boehm, F.
Brady and Martin
Burgoyne, Burbidges
Burroughs, Wellcome & Co.
Chassaing and Co.
Duncan, Flockhart and Co.
Ferris and Co.
Fletcher (Lqrs. for Syrups)
Fuerst Bros.
Greeff, R. W., and Co.
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hooper, B., and Co.
Howards and Sons
Keith (Conc. Tinctures)
May and Baker (Phenacetine)
Roberts and Co., Vinolia &c.
Sellers, J.
Symes and Co.
White, Alfred, and Sons
Willows, Francis and Butler
Woolley, Sons and Co.
Wyleys (Various)

PHOTOGRAPHIC
Botwright and Grey
Howards and Son (Chemicals)
May and Baker
Marion and Co.
Perken, Son and Rayment
White, Alfred, and Sons

PLASTERS
Cooper and Co.
Johnson and Johnson
Mathor, W.
Maw, Son and Thompson,
Quilliam, J., and Co.
St. Dalmas, A. De
Seabury and Johnson
Smith, W. F.
Thompson, M. F
Young, H.

PATENT AGENTS
Horn and Son

PILLS (Coated, &c.)
Allen and Hanburys
Beecham, Thomas
Blair's Gout Pills
Evans, Sons and Co.
Hooper, Dr.
Holloways
McKesson and Robbins
Newbery and Sons
Sanger, J., and Sons
Smith, W. F.
Warner, W. R. (Coated)
Warren, A. and J.
Wyleys and Co.

PILL MACHINES
Pindar, J. W.
Robertson, J., & Co. (Coating)
Toogood, W. (Coater)

PINE PRODUCTS
Burroughs, Wellcome and Co.
Stern, G. and G.

PODOPHYLLIN, &c.
Keith, B., and Co
Smith, T. and H.

PORCELAINGOODS
Toogood, (E.o. Pots, regist.)

POLISHING
Bradley & Bourdas (Albatum)
Cakey, John, and Sons
Griffiths, J. M.

PRINTING
Bowers Bros.
Cyclostyle Co.
Ford, Shapland and Co.
Silverlock, H.
Townsend, J. (Exeter)
Zuccato and Wolff

PUMILINE
Stern, G. and G.

QUININE SALTS
Andreae, Oscar, and Co.
Howards and Sons
Kuhn, B.
Zimmermann and Co.

RECIPES
Brooks, T.

RENNET
Duncan, Flockhart and Co.
Oldfield, Pattinson and Co.

SACCHARIN
Allen and Hanburys
Burroughs, Wellcome and Co.

SALICIN
Macfarlan and Co.
Smith, T. and H., and Co.

SALOL
Kuhn, B.

SAUCES, PICKLES
Goodall, Backhouse and Co.
Tyrer, P.

SCHOOLS OF PHARMACY, &c.
Bollingbrooke House
Central School of Chemistry and Pharmacy
City School of Chemistry and Pharmacy (Lim.)
Liverpool School
London Homœopathic and Medical School
Manchester College
South London School of Pharmacy, Lim.
The School of Pharmacy
Westminster College

SELTZOGENES
Bratby and Hinchliffe
Durafort
Evans, Sons and Co.
Fevre, T.
Geraut, E. and Co.
Idris and Co.
May, Roberts and Co.

SHAVING
Hovenden and Sons
Lloyd's, Mrs., Euxesis

SHEEP DIP
Cooper and Nephew
Bigg, T.
Fletcher, Sons and Co.
Peile, H.
Tomlinson and Hayward

SHOP FITTERS
Bowling and Govier
Bygrave, J. and W.
Corsan, J. R.
Harris, A. J.
Howlett, S.
Mathys J. and Co.
Natali, E. (Show Cases)
Poths, H., and Co.
Yates, W. S.

SOAP
Chiswick Soap Co.
Cook, E., and Co.
Pears' Soap

SPECTACLES
Botwright and Grey
Darton, F., and Co.
Raphael and Co.

SPIRIT
Boord and Son
Burrough (Pure and Methyl.)
Harvey, J. W., and Co.
Jones and Co. (Methyl.)
Leslie, J., and Co.
Macnair, J. and D., and Co.
Phillips and Co.
Smith, Stephen and Co.

SPONGE
Peterson, M., and Co.

STAMPS (RUBBER)
Hickisson, J.
Pollard, A. W.

STOPPERS
Austin and Co. (Sprinklers)
Barnett and Foster (The Eclipse)
Sanders, H. G., and Son

STOVES
Clark, S. and Co.

SURGICAL
Ayrton and Saunders
Bailey, W. H., and Son
Barclay and Sons (Limited)
Cooking, J. T.
Eschmann Bros. and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Maw, Son and Thompson, S.
Robinson and Sons
Schutze, F., and Co.
Woolley, Sons and Co.
Wood, Vincent

STARCH
Critchley (Gloss)

SUGAR
Gibson, R., and Sons

SULFONAL
Burroughs, Wellcome and Co.
Greeff, R. W., and Co.
May and Baker

SYPHONS
Barnett and Foster
Bratby and Hinchliffe
Durafort
Favarger and Co.
Fevre, T.
Gueret, E., and Co.
Kilner Bros.
Lang, Jules, and Co.
Melin, C.

SYRINGES
Schutze, F., and Co.

SYRUPS
Churchill, Dr.
Fletcher, Fletcher (Liquors)
Idris and Co.
Swann, H. H.

TARTARIC ACID
Andreae, Oscar and Co.
Greeff, R. W., and Co.

TEETHING PADS
Marriot, E., and Co

TIN CANISTERS
Noakes, B., and Co.

TEA
Cave, Johnson and Co.
French and Langdale
Gt. Tower St. Tea Co.
Hesketine, Wm., and Son
United Kingdom Tea Co. (Ld.)
Walker and Dalrymple
Watson, J. and Co.

THERMOMETERS
Bailey, W. H., and Son.
Borry, F. H.
Darton, F., and Co.
Hague, J. J.
Porken, Son and Rayment

TOBACCO—CIGARETTES
Peacock, M. & R.

TOILET
Albucar Paper Co. (paper)
Fonlkes, W. J.
Hopgood and Co.
Mack, H.
Quelch, H. C.
Sanitary Paper Co.
Travado, S., and Co.
Vigis, L.

TOOTH PASTE
Jewsbury and Brown
Maw, Son and Thompson, S.
Sutton, C., and Co. (Block)
Wilson, A. (Bunter's)
Woods, M. (Arcca)

TRADE MARKS
Horn and Son

TRUSSES
Bailey, W. H., and Son
Haywood, J. H.

TYPE-WRITING
Hickisson (Rubber)
Pollard, A. W.

URETHANE
Howards and Sons

VACCINATION
Renner, Dr. (Vaccine Lymph)
Vaccine Association (Lymph)

VALUERS AND TRNSFR. AGNTS
Baker, P. C.
Brett, F. J.
Crocker, G. B.
Orridge and Co.
Tomlinson, T., and Son

VERMIN KILLERS
Battle, J. R.
Hunter, J.
Sanford and Son
Steiner and Co.

VASELINE
Chesebrough Manufctring Co

VETERINARY
Bigg, T.
Corner, R. (Devonshire Oils)
Day and Sons
Day, Son and Howlitt
Down, H., and Co.
Ellman, Sons and Co.
Gregory, W. (Devonshire Oils
James, W. H. (Blister)
Rumney's Food for Horses
Spratts (Dogs)
Sutton, F., and Co.
Walker, Troke and Co.
Wyleys and Co

WHOLESALE AND EXPORT DRUGGISTS
Allen and Hanburys
Barron, Squire and Co.
Brothers, J. and Co.
Burgoyne, Burbidges and Co.
Evans, Sons and Co.
Evans, Lescher and Webb
Evans and Sons (Limited)
Ferris and Co.
Goodall, Backhouse and Co.
Harker, Stagg and Morgan
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Kernick & Son
Lofthouse and Saltmer
Macfarlan, J. F., and Co.
Oldfield, Pattison and Co.
Potter & Clarke (American,
Sumner, R., and Co.
Symes and Co.
Thompson and Capper
Walker, Troke and Co.
Willows, Francis, and Butler
Woolley, Jas., Sons and Co.
Wright, Layman and Umney
Wyleys and Co.

WINES, SPIRITS
Boord and Son
Coleman and Co. (Meat and Malt)
Durrant, G. (Orange)
Goodall, Backhouse and Co
Harvey, J. and W., and Co.
Hassall and Co.
Idris & Co.
Ingram and Royle
Jones and Co.
Millar, A., and Co.
Pearson's Liebig's Beef Wine
Phillips, G., and Co. (Pure Spirits of Wine)
Robinson, B. (Orange, Beef Wine)
Smith, S., and Co. (S.V.R.)

USE LIEBIG COMPANY'S EXTRACT OF MEAT.

*** Ask for the COMPANY'S Extract, and see that it bears Justus von Liebig's SIGNATURE IN BLUE INK across the Label.

OFFICE TELEPHONE No. 6714.
MANAGER'S TELEPHONE No. 2794.

Cable and Telegraphic Day Address:—"RUMATIX LONDON."
Cable and Telegraphic Night Address:—"EDUCIBLE LONDON."

Office of
The Charles A. Vogeler Co.
WILLIAM E. GEDDES:—EUROPEAN MANAGER.
45, Farringdon Road, London, E.C.

IMPORTANT TO CHEMISTS

NEW AND REVISED PRICE LIST.

EVERY Dealer in Medicine, who reads *The Chemist & Druggist*, is invited to send to us for our New and Revised Price List for "ST. JACOBS OIL." . . . Also for new, original and attractive designs in Advertising matter, which will be sent forward, carriage paid, on receipt of Chemist's Card.

The enormous Sale and popularity of "ST. JACOBS OIL," together with the attractive manner in which the Goods are now put up, should warrant the Dealer in giving as much prominence and display to the advertising matter as possible.

It is a fact admitted everywhere, that "ST. JACOBS OIL" is used more generally among the Upper Classes than any other Proprietary Medicine. . . . This is owing, not only to the intrinsic value which the Oil possesses, but to the original and dignified manner in which all of our announcements are worded. . . . It is a fact that never a word appears, in connection with "ST. JACOBS OIL" Advertisements, which is not strictly proper for every member of any family to read. . . .

Our NEW PRICE LIST will place the Retail Dealer on more favourable terms than heretofore.

The Best is Best.

LONDON.] MAY 11. [1889.

Reports upon The Best Extract of Malt.

THE LANCET.

The *Lancet*, after due inquiry and investigation, reported upon the Kepler Extract of Malt as follows :—"It is the best known and, in this country, the largest used Extract of Malt. It is as distinct an advance in therapeutics as was the introduction of cod-liver oil. It is one of our best nutritive and digestive agents for chronic dyspepsia, and is undoubtedly useful in consumption and other wasting diseases."

In the above dictum we find the gist of the whole matter in a nut-shell, and very naturally it may be asked—what is this Extract which the *Lancet* pronounces the best known and largest used? What is this product that is as distinct a step forward as the discovery of Cod-liver Oil? What is the nature of this nutritive and digestive agent, undoubtedly useful in wasting diseases? The answer is simply—it is an improved, refined, condensed, highly nutritious and easily assimilable food that has been used for untold ages. It is an advance upon the "ptisan" of antiquity, quite as great and substantial as the improvement "Tabloids" is upon primeval modes of medication. It is an Extract of the choicest Barley Malt, which has been made by straining an infusion of the best malted barley, evaporating the liquid *in vacuo* and condensing it by very special and improved methods. So great a food is barley that some have endowed it with the dignity of medicinal properties. Well may the *Lancet* pronounce it "as distinct an advance in therapeutics as was the introduction of Cod-liver Oil." The great Liebig considered malted barley the greatest discovery in the matter of infant feeding.

THE LONDON MEDICAL RECORD.

The *London Medical Record* says :—"The Kepler Extract is the best, richest in diastase, and the most largely used. We have witnessed the processes, have tested it, and are satisfied that it is not only unsurpassed, but unequalled. It is the Extract of Malt which every physician now prescribes."

It will be observed that in this quotation the verdict is the same as in that from the *Lancet*, viz., that "Kepler's is the best." But it is further pointed out that it is the richest in diastase. Now, of all the grains barley is pre-eminently the one rich in diastasic ferments. Before this one grain, diastasically, all other grains are merely chaff, and in malting a combination of them the barley's diastase is ordinarily relied on to do the work. As is well known, the action of malt diastase is the same as that of the saliva and of the pancreatic juice, viz., to convert starch into sugar. When the food is bolted, the saliva has no time for action, indigestion ensues, and it is in such cases that the Kepler Extract has been found useful, for "it is not only unsurpassed, but unequalled."

The *London Medical Recorder* confirms the quotation already transcribed, as follows :—"The Kepler Extract of Malt speedily improves the power of assimilation, and in cases of consumption, scrofula, and many of the wasting diseases of children, a wonderful improvement in the patient's condition may be noticed after a fortnight's treatment." We have here a typical example of how physician after physician has reported upon this product. No more trying chronic ailments are daily encountered than consumption, scrofula, and the wasting diseases of children. When cod-liver oil has failed, and the food is disagreeing, and medication proves worse than useless, the Kepler Extract affords a recourse sure and steadfast—one which gives promise of an improved condition after a fortnight's treatment. It improves the digestion, and upon this follows improved assimilation and nutrition, both of which give rise to a better appetite: this in turn again carries the improvement onward.

MEDICAL TIMES AND GAZETTE.

The *Medical Times and Gazette* reports as follows :—"The Kepler Extract of Malt is deserving of special commendation. It is, we venture to say, by far the best we have seen, the one most widely known and most largely used. By their new process, which includes evaporation at an unusually low temperature, all of the diastase is fully preserved, and the Kepler Extract of Malt will be found unequalled in its power of digesting starchy or farinaceous foods." Why is the Kepler Extract of Malt deserving of special commendation? First of all, because it is made from the choicest barley only. Second, because barley contains more choice ingredients obtainable by malting than any other grain. Third, because no grain malts like barley. Fourth, because the Kepler Extract is prepared at every stage by the most improved and scientific processes. Fifth, because nothing is wasted, and all the digestive, nutritive, and alterative principles of the grain are secured. Sixth, because nothing insoluble and indigestible is retained. Seventh, because in taste it is as delicious as honey. Eighth, because in the system none of it is lost, and it is all easily absorbed.

The Kepler Solution and Kepler Malt Extract supplied to the Trade in bottles, containing $\frac{3}{4}$ lb. and $1\frac{1}{2}$ lb., at 22*s.* and 38*s.* per doz. Retail prices, 2*s.* 6*d.* and 4*s.* Special terms to Hospitals. Supplied by all Chemists throughout the World.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

Above Prices subject to usual Discount.

PETROLEUM "PETROLATUM" JELLY.

PURE — NEUTRAL — COLOUR, LIGHT STRAW.

To meet the large demand for a SECOND Quality of Petroleum Jelly, we are now offering "Petrolatum," a Superior Article to any other on the Market.

Put up in ...	5-lb. Tins.	50-lb. Tins (Two Tins in a Case).	Barrels, about 3 cwt. each
Net Prices ...	46/8	42/-	35/- per cwt.

CHESEBROUGH MANUFACTURING CO., 42 Holborn Viaduct, LONDON, E.C.

OR OF ALL WHOLESALE HOUSES.

CAUTION.—*"Petrolatum" is not equal to or intended as a substitute for our mark "VASELINE."*

TRINITRINE (Nitroglycerine).

Trinitrine.—"Trinitrine is the new name for nitroglycerine, the general adoption of which has been advocated by Dujardin-Beaumetz, Huchard, and other Continental observers.—*Its occurrence in prescriptions is less likely to alarm the susceptibilities of delicate, nervous, or highly-strung patients than the more commonly employed term.* The Tabloids of Compressed Trinitrine are made with sugar of milk, which is admirably adapted for the purpose, and dissolves much more rapidly than any of the ordinarily employed excipients. We have made trial of these new tabloids, and find that they answer admirably in cases of angina-pectoris, giving prompt relief to the paroxysms of pain. The Compound Trinitrine Tabloids, containing, in addition to nitroglycerine, nitrite of amyl, menthol, and capsicum, constitute a valuable preparation, and will, in all probability, speedily replace the officinal formula."—*Lancet*, April 24, 1886.

In full doses Trinitrine accelerates the heart's action, dilates the arterioles, flushes the face, and produces headache. Too large a dose may cause langour, nausea, pain in the stomach, and occasionally even temporary unconsciousness.

TABLOIDS.

	Gr.	To the Trade. In bot.	Retail	Doz.
Trinitrine (*Nitroglycerine*) ..	1/100	25 ..	1/	7/
" " ..	1/100	100 ..	2/	18/
" " ..	1/50	25 ..	1/	7/
" " ..	1/50	100 ..	2/	18/
Trinitrine and Amyl Nitrite	—	25 ..	1/6	12/
" "	—	100 ..	4/	36/
Trinitrine Comp. { Trinitrine ..	1/100	25 ..	1/6	12/
Nitrite of Amyl	¼			
Capsicum ..	1/50			
Menthol ..	1/50 }			

Above Prices subject to usual discount.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

Spiritus Ætheris Nitrosi.

Guaranteed to contain the proportion of Nitrous Ether directed by the British Pharmacopœia.

Æther Nitrosus and Sol. Ætheris Nitrosi.

Respectively 8 and 4 times the strength of the Spirit.

Sol. Æthyl Nitritis.

Containing 3 per cent. of Pure Nitrite of Ethyl, in Absolute Alcohol and Glycerine.

See paper by Professor LEECH on "The comparative effects of Spiritus Æ heris Nitrosi and Solution of Ethyl Nitrite," *Pharmaceutical Journal*, December 22, 1888.

Spirit. Ammoniæ Aromaticus.

Made from Volcanic Ammonia.

JAMES WOOLLEY, SONS & CO.

Manufacturing Pharmaceutical Chemists,

MANCHESTER.

Laboratories and Drug Mills, Knowsley Street, CHEETHAM.

PRICE LIST FORWARDED ON APPLICATION.

I could not say. Mr. Charles Milton Fegen, surgeon, of Brandon, said that, from the evidence he had heard, and from the appearance of the body, he had every reason to believe that death resulted from poisoning by strychnine. The Coroner intimated that the jars containing the stomach and other internal organs would be taken to Ipswich for an analysis of the contents by the county analyst. It was absolutely necessary that they should know for a fact what the poison was of which the deceased died. They had heard from the gamekeeper that it was given to him as strychnine, but of course he did not know it for a fact. The inquiry was then adjourned.

HULL.

THE PROPOSED RAILWAY RATES.—The Hull chemists had a meeting on May 2, which was very well attended. After some discussion Mr. Earle moved—

> That a sub-committee, consisting of Messrs. Saltmer, Allison, Bell, and Earle, be formed, and instructed to wait on some solicitor and take advice as to the best course to take in carrying out the opposition of the Hull chemists and druggists to the proposed scale of railway charges under the Railway and Canal Traffic Act.

Mr. Stoakes seconded the motion, which was carried after discussion. Mr. Tebb moved, and Mr. Earle seconded—

> That the secretary be instructed to communicate with individual chemists, urging them to petition the Board of Trade individually.

The resolution was carried unanimously.

LIVERPOOL.

CURRICULUM BILL.—Independently of the stand taken by the Chemists' Association against the so-called "Pharmacy Acts Amendment Bill," the chemists of the city and suburbs are signing the following petition, which will in due course be presented to Parliament:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The humble petition of the undersigned registered chemists and druggists of the City of Liverpool and its vicinity. Sheweth:—

That your petitioners regard the Pharmacy Acts Amendment Bill now before your honourable House as an unnecessary measure, and one calculated to act oppressively on those who seek to enter the business.

That it will impose a further burden on all such, and will doubtless increase the amount of illicit trading in drugs and medicines which already exists to the prejudice of and danger to the public.

That the Council of the Pharmaceutical Society of Great Britain has already endeavoured to acquire the powers now sought by modifying its by-laws; but the Privy Council refused to confirm the resolution.

That the late Dr. Greenhow, who attended the examinations in London on behalf of the Privy Council, held that the present test is a sufficient guarantee for the safety of the public, and that it is unnecessary to burden candidates for the qualifying examination with the extra expense of an enforced curriculum.

Your petitioners therefore pray your honourable House that the said Bill may not pass into law as it now stands.

Clearly there is a strong feeling in other towns against the Bill, and it would be well if this found expression in a similar manner. In the absence of a petition chemists would doubtless obtain similar results by writing to their Parliamentary representatives.

THE COMING ELECTION.—Mr. Marshall Leigh is the only candidate for the Council who has issued an address so far. This gives satisfaction here, and he will no doubt be well supported in Liverpool. Mr. Abraham's political views are not well known; would it not have been well for him to publish them?

MAY DAY.—The usual equine procession occurred, and advertisers were as usual to the fore. The chief nostrum which came under notice was Gwillym Evans's quinine bitters, which monopolised four vans. The most original was that of Messrs. Lever Brothers, who had a series of donkeys, over each of which a scarlet cloth was placed, bearing the assertion, "We do NOT use Sunlight soap."

RAILWAY RATES.—The following are the objections formulated by the committee appointed by the Chemists' Association to deal with this matter:—

(1) That goods are sold by chemists and druggists at less profit than formerly, and that it would be unfair to further diminish the profit by large increases in the rates of carriage.

(2) That the present rates are amply remunerative, and higher than those charged for similar services in other countries where the circumstances are comparable.

(3) That the increases proposed would in many cases force traffic which would naturally go by rail to water and road conveyance, causing immense delay and inconvenience. It would be specially injurious in the case of the goods dealt in by the objectors, and highly prejudicial to the convenience and interests of the public.

(4) That before the railways obtained control of the Grand Junction Canal druggists' goods of the classes now proposed to be charged 104*s*. per ton were carried for about a quarter that rate between London and Liverpool.

(5) The proposal to make the additional charge on smalls 100 per cent., instead of 10 per cent. or 15 per cent. as at present, is exorbitant, and especially oppressive to chemists and druggists, seeing that nearly the whole of the goods they use come under that definition, and necessarily so, on account of being required in fresh condition.

(6) Packages of goods consigned to retail druggists are made up of a number of articles, Classes C, 1, 2, and 3, such as alum, sodæ bicarb., ammonia, crem. tart., and vaseline, the proportions of the higher class being very small. The average value of the drugs is not greater, but rather less, than many goods in lower classes, and less liable to damage in transit, being more securely packed. For these reasons drugs should be classed lower, and not higher, than formerly.

(7) Chemists cannot carry on their business without returning empty bottles, packages, &c., and seeing that they pay a higher rate on receipt, it is obviously unfair that on returning the packages they should have to pay the high rate chargeable in Class 5, whereas they come under rates already provided, in the lower classes. In some instances these high rates of carriage on returns will be in excess of the value of the articles.

These will be presented to the Board of Trade in due form and course, and will be supported by personal advocacy when the time arrives. It has been observed that in the report presented to the wholesale drug trade by its sub-committee the "olive-oil" objection is a weak one, and certainly not complimentary to chemists. Referring to the *inferior* oil it says, "In many instances no other oil can be substituted; this latter is particularly the case with many medicinal preparations, for which it is largely used." Is this so?

MANCHESTER.

SUDDEN DEATH OF A CHEMIST'S WIFE.—Information has been received by Mr. F. Price, County Coroner, of the death of Sarah Ann O'Neill, a woman 48 years of age, who resided at 15 Joseph Street, Queen's Road, Gorton. She was the wife of a chemist named Thomas O'Neill, but lived apart from her husband. On Saturday she complained to a neighbour of feeling "dizzy in her head, as if she was going out of her mind," and next morning she was found lying dead in bed, with her hands tightly clenched.

THE Manchester section of the Society of Chemical Industry, with Dr. G. H. Bailey in the chair, held on Tuesday night its seventh, and probably its last, meeting for the present session. The programme consisted of a paper by Mr. W. F. Lowe, assayer at Chester, on assaying and hall-marking at the Chester assay office, and a paper by Mr. William Thomson on the heat-producing powers of twelve samples of coal, determined by burning in oxygen (in an apparatus devised by Mr. Thomson), compared with their theoretical values, as calculated from their chemical analysis.

SHEFFIELD.

We understand that Mr. J. A. Cubley, late of the firm of Cubley & Preston, chemists, High Street, has accepted an offer to represent Messrs. Harrington Brothers, chemical manufacturers, of Shandon Chemical Works, Cork.

During the visit of the "Little Lord Fauntleroy" Company to the Theatre Royal this week the building has been perfumed each night with Mr. Robert Watts's "Fauntleroy Bouquet," much to the satisfaction of the audience.

The inhabitants of Mexboro' are in a great state of alarm on account of several cases of fish-poisoning which have occurred at intervals lately, so much so that one of the fish-dealers of the town has found it necessary to inform the public through the medium of the daily papers that they need not be afraid of eating what he sells, as his fish is not poisoned.

WIMBORNE.

Prosecution under the Explosives Act.—At the Wimborne Petty Sessions recently, George Frederick Huntley, chemist and druggist and dealer in explosives, the Square, Wimborne, was summoned under the provisions of the Explosives Acts, 1875, for keeping a substance of a highly inflammable nature within an unsafe distance to gunpowder, on April 20. The summonses embodied six or seven offences. The evidence showed that Colonel Ford, an inspector under the Explosives Act, accompanied by a police sergeant, visited Mr. Huntley's shop, and found that the substantially-built gunpowder store in the garden was too near an oil-house in which paraffin was stored. There were 151 lbs. of gunpowder in the store, and of this Colonel Ford seized 101 lbs. It was mentioned that in 1882 the Colonel visited the same premises and made no complaint regarding the proximity of the stores; further, they were sixty yards distant from any dwelling-house. Some difference of opinion existed in the evidence regarding the inflammability or otherwise of the paraffin. The Bench retired for about ten minutes, and on returning stated that they were of opinion that Colonel Ford should come down and give his opinion as to what was best to be done with the buildings and premises for the safety of the public. They said that Mr. Huntley must remove the oil, and imposed a fine of 3*d.* per lb. on the 101 lbs. of gunpowder seized. This decided one of the cases, and the others were withdrawn. The Bench agreed to return the powder to Mr. Huntley provided he took away the oil. Mr. Dickinson asked if the Bench would formally declare that paraffin was of a "highly inflammable nature," and he should then ask them to state a case upon it. The Chairman intimated that the Bench would decline to commit themselves to a definite statement of that kind.

IRELAND.

The poor-law guardians of the South Dublin Union have announced their intention of building a dispensary at Fallaght, county Dublin.

Mr. McNamee, late manager of Dr. Sloper's pharmacy, Rathmines, Dublin, has been appointed to a similar position in Ballinaslol.

The Dublin civic authorities have within the past week appointed a committee of aldermen and councillors to act on behalf of the citizens in connection with the proposed Railway Rates Bill. As the majority of these gentlemen have themselves a vital interest in the movement, it may be taken for granted that in minding number one they must of a necessity guard the welfare of the general public.

SCOTLAND.

Aberdeen.

Aberdeen and North of Scotland Society of Chemists and Druggists.—The meeting which was arranged for April 24 was postponed till May 1. Fifteen members were present, and the president, Mr. J. Johnston, occupied the chair. Before proceeding to the business of the meeting, he thanked the members for placing him in the president's chair, and trusted that all the business coming before the meetings would be conducted harmoniously, and for the benefit of the society. He recalled the fact that thirty years ago he was president, and of the seven members who attended the annual dinner then, five had gone to swell the great majority, one had retired from business, and the other was himself. "Cutting prices," Mr. Johnston continued, "were then unknown in the trade, and I should have been very glad indeed to have occupied this chair under the then existing style of doing business, viz., the principle of live and let live, charging fair prices, leaving a margin of profit for capital invested and remuneration for our labour." An intimation was made to the meeting that Mr. Coutts declined, on account of his late serious illness, to accept the post of librarian. The members present expressed their regret, and hoped that he would soon be restored to perfect health. Mr. John Cruickshank was then elected his successor. The Secretary (Mr. A. Strachan) reported the names of those who had not joined the society for the current year, and Messrs. Johnston, Kay, J. Paterson, Giles, G. J. Shepherd, and G. P. Cruickshank were appointed a deputation to call upon them. The members then discussed what form the annual outing should take. After a general expression of opinion, it was resolved to have a picnic at Paradise, either on June 12 or 26, or July 3. Ladies, of course, would be invited. The committee to make the arrangements. Dr. Presslie and Mr. J. Cruickshank then reported the financial result of the entertainment to the assistants and apprentices in the Music Hall Buildings, on March 5, and the meeting separated until May 29, at 8 p.m.

Edinburgh.

The Dental Hospital and College has now moved to its new quarters in Lauriston Lane, adjoining the infirmary and the Royal College of Physicians' laboratory.

Chemists' Assistants' and Apprentices' Association.—The general committee have arranged for six botanical excursions during this summer, commencing next Wednesday, May 15, when the Botanic Gardens will be the scene of action. Knights of the spud and vasculum are requested to be at the garden gate at six o'clock in the morning. They will obtain further particulars regarding the excursions from the secretary of the association, or from Mr. Rutherford Hill, of the Pharmaceutical Society, 36 York Place. Mr. J. Findlay offers a copy of the British Pharmacopœia for the best report of the excursions written by an apprentice member.

Glasgow.

Fire in a Drug Warehouse.—On the night of the 2nd inst. fire broke out in the back cellar of the new Apothecary Company's warehouse at the corner of Glansford Street and Wilson Street. Dense smoke filled the cellar, and three of the men of the Central Fire Brigade were overcome by the fumes. One of them, Bob Allan, was taken out quite unconscious, but Sergeants McLeod and McDonald laid him on the pavement in Wilson Street and used the method they had learned in the ambulance class to restore respiration—a result which they attained before a medical man arrived. Allan and another comrade were taken to the headquarters in College Street and then sent home. The third man was soon all right. The material damage was trifling, as the fire burned only straw and empty wooden boxes. Only a short time since the same part of the premises was the scene of a more serious outbreak of fire, causing a loss of about 200*l.*

Wine Licences.—Mr. Galbraith is perhaps technically correct in stating that no druggist in his county holds the particular kind of licence for which he applied, but his shop is in a part of Glasgow lying in Renfrewshire, while the most of the municipal area is in Lanarkshire. The two firms previously referred to hold grocer's licences, for the acquisition and renewal of which application is made to the Magistrates' Licensing Court.

The Victoria Infirmary.—The buildings for this new hospital on the south side of Glasgow are rapidly nearing completion, and it is expected that the institution will be ready for opening in a few months. Steps are being taken for the appointment of a medical staff, and there is some talk of establishing a medical school, in which event South-side druggists strongly feel that a reasonable provision should be made for the teaching of pharmacy by appointing a pharmaceutical chemist as lecturer on that subject.

News.

Poisoning by Carbolic Acid.—A youth named Edwin Greenhalgh, aged 19, a Bolton printer's apprentice, committed suicide on May 8 by taking carbolic acid.

A German manufacturer of eau de Cologne will, it is said, start a flower farm in Franklin, Kentucky, U.S.A., and also contemplates erecting a factory there for manufacturing perfumes.

The St. Petersburg Pharmaceutical Society's report for 1888 states that the Society's numerical strength has decreased during the year from 298 to 284 members. This number includes seventy-four honorary and forty-six corresponding members. The attendance at the Society's School of Pharmacy leaves much to be desired, the institution only counting four students at present.

Western Java Cinchona Company.—At the annual meeting of the shareholders in this concern, held at Amsterdam a few days ago, it was stated that there are now in the four Java plantations of the company an aggregate of 3,600,000 *Ledgeriana* and 150,000 *Succirubra* trees. The net profit for the year 1888, almost exclusively obtained on the sales of cinchona, amounting to 98,750f., was 37,812f., which admits of a dividend of 3¾ per cent. to the shareholders. In view of the falling of the quinine prices, experiments are constantly being made with other articles, and the coca plantations at Tjiseureuh and Bajabang are in a flourishing condition.

"Poisoned by Absinthe" was the verdict returned at an inquest held at the South Devon and East Cornwall Hospital, Plymouth, on Friday last, touching the death of Eigal Inglebreeksen, a seaman of the Norwegian barque *Dacapo*. Mr. Aldous, surgeon, who had made a post-mortem examination, found the gullet and larynx much inflamed, evidently by the introduction of some irritant poison, and having learned from the evidence that deceased had drunk a considerable quantity of absinthe whilst at a French port, he had no doubt that absinthe, which contains oil of wormwood, was the cause of the inflammation and consequently of death.

The Druggists of Chicago have succeeded in getting the Mayor defeated by 11,000 votes in the recent city election. Mayor Roche had made himself abnoxious to the druggists regarding some telephone business, his course of action being "in insolent defiance of the protests of the druggists." So they harboured up their bad feeling and let it out at election time in the shape of a hundred thousand circulars containing "non-partisan facts" in regard to Mayor Roche's doings about the telephone. These told, the Republican Mayor has gone, a democrat has taken his place, and 500 druggists wield their pestles with redonbled energy and unconcealed glee.

A Druggist's Trip.—Mr. J. W. Colcord, a well-known Boston (Mass.) pharmacist, is arranging a pharmaceutical excursion to Europe, which will probably leave New York by the Netherlands line about July 18. From Amsterdam the party will proceed up the Rhine to Strasburg, stopping at Cologne and various other places of interest. Thence they will proceed to Paris, where a stop of seven or eight days will be made. Thereafter they come to England. The trip will extend over a period of forty days, the total expense will not exceed $250 for each person, and the number of the party will not exceed thirty. They will be in Paris at the time of meeting of the Chemical and Pharmaceutical Congress, it is expected; and if they manage things properly they will be able to attend the meeting of the British Pharmaceutical Conference in Newcastle at the beginning of September. From there they could proceed to Scotland, if "the land of the mountain and the flood" is included in their programme.

Herb and Ginger Beers.—On Monday, in the House of Commons, Mr. C. Graham asked the Chancellor of the Exchequer whether he could promise any relief to the manufacturers of herb and ginger beer from the provisions of the Customs and Inland Revenue Act of 1888. The Chancellor of the Exchequer said: I presume that the hon. member refers to the Act of 1885. Herb beers, which do not contain more than 3 per cent. of proof spirit, can be made and sold without any interference. For the security of the revenue it is absolutely necessary to attach a penalty to the selling of any such beers containing more than 3 per cent. of proof spirit. Complaints have arisen in the trade as to the method of enforcing these penalties, and representations have been made to me through the instrumentality of the member for West Birmingham. In consequence of these representations some changes in their method of procedure have been adopted by the Inland Revenue, which I hope may be satisfactory to the trade.

Protectionist Chemists.—The *Star* has had another turn at the advocates of the Pharmaceutical Curriculum Bill. It says: "The promoters of the Pharmacy Acts Amendment Bill, to which we referred last week, have, like the rest of their creed, no one solid argument for their measure. Do they seek the public safety? The late Dr. Headlam Greenhow, the Government inspector of the examinations, repeatedly reported to the Privy Council that the examination affords a sufficient guarantee for the safety of the public and of competence in the candidates who pass. Are the candidates ignorant or insufficiently educated when they present themselves? During the past three years under 9 per cent. failed in chemistry, and under 4 per cent. in botany and materia medica, the very curriculum established by the Bill, so that candidates are fully able to obtain the necessary instruction under the existing state of things. Do they seek to save the candidate expense? On the contrary, the proposed compulsory attendance at lectures would seriously increase the expense and shut out worthy men. Do they want to provide increased and better facilities for obtaining prescriptions and drugs? No; for they admit the measure will have the effect of limiting the numbers in the trade. What, then, are the real reasons? As regards the Council of the Pharmaceutical Society, because the School of Pharmacy under its control is not patronised enough to please them, and is cut out by other institutions. As regards the trade (and it should be remembered that the promoters of the Bill are all in business), to increase their profits by reducing the number of chemists and druggists. Really it is too late in these days to attempt to stop the march of free trade and open competition; and we, therefore, call upon Parliament to reject the Bill on the second reading on May 8."

The Proposed "Ring" in the Glass-bottle Trade.—A correspondent of the *Times* writes:—The negotiations connected with the formation of a gigantic "ring" in the glass-bottle trade industry are approaching completion. About three months ago, at a representative meeting of manufacturers engaged in the industry, held in London, the project was mooted and was commented on very favourably. All branches of the trade were largely represented. Since the date of the meeting the arrangements have been conducted with great secrecy, and are now on the point of completion. The number of firms in England is about forty, and it is thought by those interested in the success of the combination that it will be a matter of no great difficulty to succeed with the enterprise, seeing that no less than thirty-five manufacturers have intimated their willingness to join in the movement. Whether the "rings" if formed, will have the precise effect desired by its promoters remains to be seen. There is no doubt, however, in the minds of many glass-bottle manufacturers that better prices will result from the adoption of the "trust" system in this particular trade. It is stated that the principal firms who have not expressed willingness to join the movement are those of Messrs. Wood, Carrington and Shaw, and Kilner Brothers. Most of the provincial firms have given their support provisionally to the scheme, and it is thought that some of the manufacturers who have hitherto held aloof from the movement will see their way to join it when the proposals of the promoters are made fully known. Valuers have been appointed to make the necessary assessments, and it is anticipated that when this work has been completed definite action will be taken by the general body of glass-bottle makers. The scheme is exciting a great amount of interest in the various centres of the industry. We understand that the committee which has been appointed in Yorkshire to further the scheme is composed as follows:—Messrs. Barron Kilner (Wakefield), Macvay (Castleford), and Breffit (Castleford), and the secretary is Mr. Kaberry, of Pontefract.

Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on Wednesday, May 1. Present: the President (Mr. James E. Brunker, M.A.) in the chair; the Vice-President (Mr. Draper), and Messrs. Merrin, Beggs, Wells, McCormack, Hayes, Hodgson, Allen, Simpson, and Grindley.

A letter was read from Sir Spencer Wells, stating that the International Congress of

HYGIENE AND STATISTICS,

which was held at Vienna last year, would be held in London in 1891, and inviting the Council to appoint two of its members to serve on a general committee intended to be formed for the purpose of organising the congress.

The Registrar was directed to reply to the letter, stating that two members would be nominated in due course.

A letter was received from the Pharmaceutical Society of Great Britain, returning thanks for a donation of the Society's Calendar of 1889.

The PRESIDENT reported that the House Committee met on April 6, and having fully considered

THE FINANCIAL POSITION OF THE SOCIETY,

arrived at the conclusion that they would not be justified in recommending the Council, pending expected legislation, to involve itself in increased expense by removing to larger premises. They therefore recommended that arrangements should be made with the landlord of their present premises to remain there for another year.

The report was adopted.

On the motion of Mr. Allen, seconded by Mr. Hayes, the certificates of the successful candidates at the April examinations were ordered to be sealed.

The PRESIDENT stated that he had received a letter, dated April 26, from Messrs. Clay & Close, inquiring what were the intentions of the Council as regarded the introduction of a

PHARMACY BILL

in the present session. He had replied that at present the Council had not come to any decision. No communication had been received from the Chemists and Druggists' Association since the Council had declined to send representatives to Belfast to meet them in conference there. The only thing he had heard in connection with the matter was that it was very probable that the Belfast chemists would at once introduce a Bill containing the amendments that were adopted last year.

Mr. WELLS: Would it not be well if a direction were given to Messrs. Clay & Close to watch that Bill for us? It might be brought in very quietly.

The PRESIDENT: The Council will be at a disadvantage if such a Bill be introduced by their opponents.

Mr. WELLS said he thought this subject should be discussed in committee.

Mr. ALLEN said he was of the same opinion.

The VICE-PRESIDENT: I am of a different opinion.

The PRESIDENT said he also thought that the time had arrived for discussing the matter publicly now. At the last monthly meeting it was decided to invite the Chemists and Druggists' Association to a conference. The reply received to that invitation was that it was utterly impossible for Sir James Haslett to come to town as his brother was dangerously ill, and suggesting that two representatives of the Dublin chemists and druggists and representatives from the Council should go down to Belfast and take part in a conference to be held there. At a special meeting held that day week a majority of the Council decided that they

WOULD NOT SEND REPRESENTATIVES TO BELFAST.

That decision was communicated to the chemists and druggists of Belfast, and the whole question of a conference appeared for the present to have fallen to the ground. They had been given to understand that very possibly, after a thorough discussion of the subject between the delegates from the different bodies, an agreement might have been come to. That hope had been disappointed, and they had arrived at a deadlock.

Mr. HAYES: I think that as straightforward and honourable men we are not taking a straight course. We both want the same thing. The chemists and druggists want a Bill and we want a Bill. We have agreed to a large extent on the lines of the Bill.

Mr. WELLS: No.

Mr. HAYES: Yes; we have to a large extent agreed on the lines that both require, and why we should not meet and discuss the matter with them as straightforward honourable men I cannot understand.

Mr. WELLS: As a matter of order I wish to ask a question. At the last meeting the Council decided that they were not going to meet the chemists and druggists in Belfast. Is it competent to us to-day to pass a resolution saying that we will?

The PRESIDENT: There is no such question before the Council. What is before us now is the letter of Messrs. Clay & Close, asking what we are going to do.

Mr. HAYES: Our legal advisers have said that we ought not to withhold what we offered last year, for that if we should the House of Commons would not sanction it.

Mr. WELLS: Bear in mind that a majority of the Council did not give all that was given last year. The opponents got a great deal more last year than the Council would be prepared to give; and if it is a question of giving everything that they got last year you won't have the Council unanimous for a Bill this year.

Mr. ALLEN: I thought we had agreed to give them all that——

Mr. WELLS: That was in the draft of the Bill last year! —when?

Mr. ALLEN: Not at any one meeting, but at one meeting after another.

Mr. WELLS: The President was empowered to go to London to make terms.

Mr. HODGSON: Is there anything to compel us to bring in a Bill now? The Bill which we did bring in is lapsed, and the Society is all the poorer. If these gentlemen bring in a Bill, what is there to prevent us, if they ask too much, from moulding it into a shape that would do us justice? As Mr. Hayes has remarked, we are pledged as honourable men to a certain line of action. If in their Bill they should look for more than we arranged to give them, I suppose we would have power in the House of Commons to mould it into the shape that we originally agreed to.

The PRESIDENT: I may tell you that I have seen

THE BILL THEY PROPOSE

to bring in, and it contains exactly the amendments that we agreed to before last Christmas. There are one or two points, however, as to which we might seek rather more favourable terms than it gives. Their Bill as drawn does not give sufficient power to impose an educational test upon those who are to be registered. That, however, is a point on which we might come to an agreement if we had a conference. With the exception of that point, I personally am

PERFECTLY SATISFIED WITH THE BILL

drawn by the Belfast chemists. Every year the chance of our getting a Bill favourable to the interests of the Pharmaceutical Society will become less and less. Every year in a democratic House of Commons we will find a stronger set against anything in the nature of privilege. The House of Commons will certainly hold that this is a question affecting a privilege of an extremely small body of men, who have only been in existence for the last fourteen years; and if our opponents make the strong case that they are now able to make, but did not attempt to make last year, they will be able to satisfy the House of Commons that any opposition made by this Council to the Bill as amended is only a dog-in-the-manger opposition.

Mr. WELLS: What benefits are this Council going to get?

THE BENEFIT TO THE SOCIETY.

The PRESIDENT: I will tell you. In the first place the condition of the law, which is at present very vague, would be settled. Next, the position of a number of men who at present have legal rights, but whom we cannot identify or get at, would be defined; and, further, a number of persons

would be placed in a legal position to carry on business in places where they are wanted. The Society would gain an income which it has not got at present; we would have a machinery for ascertaining who was and who was not breaking the law; and we would have other improvements in the law—for instance, we would be able to identify the proprietors of establishments, and to ensure that no establishment would be allowed to remain open unless it was managed by a qualified person. It is quite unnecessary to recapitulate all the provisions of that Bill, which will place pharmacy in a position of security that it has not at present. The pharmacy law is at present in the vaguest possible position, with the exception of the point settled last year as to the right to dispense. You cannot prosecute for the sale of poisons in any part of the country without the certainty of failure.

Mr. WELLS: I don't see how you can make that out. We have prosecuted successfully in several cases of breaking the law.

The PRESIDENT: Name them.

Mr. WELLS: You had the Kells case and the Navan case. The only thing was that they did not go to the Queen's Bench for the law to be confirmed. Has there been a case of appeal in which a decision in our favour has been reversed? You brought the Ballybay case to the High Court, and you got a decision there.

The PRESIDENT: The simplest way to bring the matter to an issue, if you have the courage of your opinions, is to move that no steps be taken in the matter of legislation this year.

Mr. WELLS: I have had the courage of my convictions pretty well all along, and I am not afraid to stick to my convictions still; but we hear that we are going to get a lot, whereas the fact is that you are going

TO TAKE THE SOCIETY'S RIGHTS AWAY.

They have the sole right of dispensing and the sole right of selling poisons, except in the case of certain persons whose rights are saved. Now you propose to break faith with your licentiates and have a body of men who will take their places, so that it may not be possible for them to go to country towns and supply the wants that exist there, whereas the Society could go on, if it were let alone, and supply every town. We should not give away all the rights of our licentiates.

Mr. SIMPSON: Are the chemists and druggists going to bring in a Bill?

The PRESIDENT: They have their Bill ready.

Mr. WELLS: They told us that they know they cannot succeed unless we go with them.

The VICE-PRESIDENT: The object of the last meeting was to see if there could be a *rapprochement* between us and the gentlemen in Belfast. The proposal made on that occasion was—fortunately or unfortunately for the Society—negatived by a majority of two. It seems to me that a final opportunity is given to the Council to come to a decision as to its future course on the basis of this letter of Messrs. Clay & Close, who say that if we propose to undertake legislation on our own behalf it should not be deferred. If we do not undertake legislation, the Council should understand that it will be undertaken by the Belfast people on their own basis, and will not be so advantageous to us as if we effected some arrangement.

Mr. HODGSON: There are two courses open to us, either to go on with a Bill of our own and meet all the expenses of it, which will be heavy, or wait until these gentlemen, the chemists and druggists, bring in their Bill, and see how far it agrees with the promises which have been already made, and if it does not, to mould it into shape. I think you should be cautious how you go into legislation again on your own account.

Mr. HAYES: There is a third alternative—we have been invited by them to confer.

Mr. WELLS: The majority of the Law Committee were in favour of having a conference, but they objected to going to Belfast. The action of the other day was to try and draw them up to Dublin. If they came up every member would vote for receiving them and having a conference.

Mr. HODGSON: I think it very desirable that we should have a conference with these gentlemen in order to try to come to an amicable arrangement; but if I had been here the other day I would not have agreed to send a deputation of the Pharmaceutical Society down to Belfast. (Hear, hear.)

Mr. HAYES: But Sir James Haslett could not come up.

Mr. WELLS: We had better wait until it is his convenience to come up and have a friendly conference; and then, if we can get what we want, agree to a Bill and go in jointly for it.

Mr. HAYES: Precisely. That would be the rational and sensible course to adopt. I don't think these gentlemen want to take any unhandsome advantage of us, and

WE DON'T WANT TO TAKE ANY UNHANDSOME ADVANTAGE

of them.

Mr. BEGGS: I think we should wait on Sir James Haslett's convenience.

The PRESIDENT: I think any conference that took place, at which Sir James Haslett was not present, would be certain to be a failure. He writes that he cannot possibly say when there will be a chance of his being able to come. Unless the Bill is introduced within the next fortnight there will be no chance of its being pushed on this session.

Mr. GRINDLEY: There is no necessity for taking immediate action. I think it is much better for us to hold our hands. We are not prepared to incur the expense that we did last year, and by holding our hands we will improve our position.

Mr. HODGSON: I think so.

Mr. GRINDLEY: There is no necessity for rushing into a thing which, when it is got, will be of very little value to us.

Mr. SIMPSON: We cannot concede more to them than we did last year.

The PRESIDENT: They do not ask it.

Mr. SIMPSON: I think we had better let it lie over for a little while.

Mr. WELLS: If we are to get nothing, and to let them get all that they were to get last year, we should let them get their Bill and pay for it. If we are to have no voice in the matter, it would be a silly thing for us to give them our money for their benefit.

The PRESIDENT: There will be opposition on some points independent of the pharmaceutical chemists and the chemists and druggists. That opposition would be powerful enough against one lot of promoters, but it would be nowhere if the Bill were promoted in common by the Pharmaceutical Society and the chemists and druggists. If the two last-mentioned bodies come to terms about the Bill, it will be practically an unopposed measure. If not, and if the Bill should be brought in by the Belfast people, in order to give this Council a *locus standi* we must petition against the Bill as opponents. We would have all the expense of opposing it, and the Bill would be thrown out as before, and nothing would be done. We cannot choose our own ground and our own time.

Mr. SIMPSON: Is it possible to get a copy of the Bill which they have drafted?

The PRESIDENT: I was only shown it in confidence.

Mr. FERRALL read the letters which had been exchanged relative to a deputation.

The PRESIDENT: They quite understand that the Council is ready to meet them in Dublin. The invitation in the first instance came from us.

Mr. WELLS moved—

> That the Council take no step at present in reference to Messrs. Clay & Close's letter of the 29th *in re* the Pharmacy Bill.

The PRESIDENT: I think that would close the door.

Mr. HODGSON: Add the words, "Until we have held a conference with the Chemists and Druggists' Association."

Mr. Wells altered his resolution as suggested.

Mr. GRINDLEY seconded the motion.

Mr. WELLS: We are willing to meet them, but not seeking them. We are not going to run after them.

Mr. ALLEN moved—

> That the Council take no steps relative to Messrs. Clay & Close's letter until after the hoped-for conference with the Chemists and Druggists' Association has been held.

Mr. HAYES seconded the motion.

Mr. Wells withdrew his motion, and that of Mr. Allen was put and unanimously carried.

The Council then adjourned.

FRENCH PHARMACEUTICAL NEWS.

(*From our Paris Correspondent.*)

Drug Brokers may not deal in Pharmaceuticals.—Piot, a drug broker, was in 1888 prosecuted by the Paris Pharmacists' Provident Society for having in his possession, with the intent to sell the same, a certain quantity of Lavoix's chlorate of potash lozenges, prepared by Acard, a pharmacist in Paris. The charges against Piot were:—(1) Illegal practice of pharmacy, and (2) advertising and selling secret remedies; against Lavoix, acting as an accomplice before the act; and against Acard, (1) acting as an accomplice, (2) advertising and selling secret remedies. On the first trial, before the Correctional Tribunal, January 4, 1889, the Pharmacists' Society lost the suit; but on appeal the higher court has reversed the decision, and held the three respondents guilty of illegal practice, and of acting as accomplices to the principal—Piot for having laid in a stock of pharmaceutical preparations instead of confining himself to his legitimate business of brokering; and Lavoix and pharmacist Acard for having knowingly aided the broker in his illegal practice. The court imposed 500f. fine on each of the defendants, and sentenced them jointly to pay 25f. damages to the Provident Society. The second charge, selling secret remedies, was dismissed. This judgment is conformable with the jurisprudence already established by courts of appeal, namely, that no one except a graduated pharmacist may trade in pharmaceuticals even when dealing with pharmacists, and that brokers must only sell on commission. Incidentally, chlorate of potash lozenges were considered a non-secret remedy.

Drug Contracts Investigated.—Some three months since, as was mentioned at the time in The Chemist and Druggist, a committee named by the Chamber of Deputies to investigate some irregularities said to have occurred in navy sponge contracts and colonial drug supplies made reports which were ordered to be printed and distributed. But it was only last week that the documents were published in the *Journal Officiel*. So far as sponges are concerned, unless official whitewash was copiously applied, the affair has dwindled down to very little. It seems West India sponges were supplied to the navy departments and accepted, although the specifications called for "Gerbis," a Mediterranean variety which is much superior. But the department claim they set the matter right long since, as soon as they discovered the irregularity. So, according to their showing, there is nothing to investigate. The case of drugs and pharmaceuticals supplied for colonial hospitals is different. It appears a complaint was lodged on January 5 by M. Brun, of No. 1 Rue Pernelle, in the centre of the wholesale drug trade quarter, in regard (1) to the alleged facilities granted to some contractors to have the contracts extended, when it is to their interest to have it so, instead of calling for new bids at public auctions; (2) the mode of effecting and accepting deliveries of medicaments for colonial hospitals. It was charged that, as the medicines are ready put up in boxes, jars, vials, &c., ready for shipping, it is impossible for the experts to ascertain the quality of the goods, except in the case perhaps of cinchonas and quinine; it is besides charged that the weights even cannot be checked. The Minister of War named a commission, headed by Dr. Dujardin-Beaumetz, to look into the matter. Their report in substance was that the charges were not altogether ill-grounded, as the colonial service have not the same guarantees as the army and navy departments have, which purchase only crude drugs and chemicals, and have the pharmaceutical preparations thereof made by the military pharmacie centrale. The commission were of opinion that a similar system should be followed for the colonial service; only they lack the laboratory facilities. The last contract, it appears, was made three years ago (January 6, 1886) with MM. Darrasse frères et Landrin, and expired on December 31, 1888. But notwithstanding the foregoing complaints and the commission's reports, Under-Secretary of State for the Colonies A. De la Porte has replied he is going to keep up the same practice, as he cannot apply to the military central pharmacy, and has no authority to establish a laboratory. But he promised he would give the greatest possible publicity to all contracts to be awarded, and have all the compound medicines strictly inspected by a navy pharmacist. Besides, all preparations found deficient in the colonies are to be returned and replaced by others procured in local pharmacies, where, he says, medicines of very good quality are purchased.

The Centennial Celebration and the Exposition.—The celebration began at Versailles on May 5, the anniversary of the meeting there of the Etats-Généraux, the prologue of the great Revolutionary drama. Immense crowds rushed to the railway stations in Paris; at the Montparnasse terminus, near noon, generals, academicians, colonels, and all sorts of high officials in gorgeous uniforms almost outnumbering the civilians. During the Secession War, in Washington the story was current of a man who threw a stone at a dog, and, missing it, hit three generals and five colonels. The same might have happened at the Gare Montparnasse, were it not that dogs are excluded and stones out of the way. President Carnot went by the high road in a carriage. But it is unnecessary to here relate the official ceremonies, as the daily papers probably contain a full account. Sleepy Versailles was herself no more. Of late years, it is true, she has been partly awake, since the Senate and House met there, and many of her streets are no longer overgrown with grass, but she never was stormed, even on Grandes Eaux days, by such crowds as rushed there. For the occasion extensive and much-needed repairs have been made to the park waterworks and basins. For several years out of gear, the jets were again in working—or playing—order. The Latona basin, with its hundred figures or so newly regilt, sparkled in the sun under the falling spray. The splendid Apollo's Cave, at Amphitrites, and the Grand Dragon, the highest and largest water-jet in the world, could be admired by multitudes. And, finally, the most important piece of all, Neptune's basin, so much appreciated by English visitors, played again after many years' neglect, and helped to cool the air of a very warm day. At six the ceremonies were over. President Carnot rode back slowly through the streets, greeted, rather more than usually, with cheers unmingled with any unwelcome "Vive Boulanger!" Probably the silly shooting affray of the morning had some effect on the demonstration.

At the Exposition, May 7.—The second day of the celebration, which took place in Paris, scarcely needs more than a passing allusion, the daily press, both native and foreign, having devoted to descriptions of the festivities columns upon columns of solid print. While in Versailles the day was kept as a home concern, in Paris it was international. Madame Carnot, who staid away from Versailles, appeared at the opening of the Exposition, and her presence was a signal for foreign ladies to follow suit in all sorts of national costumes. The fact is Parisians love dearly exotic guests, and the more outlandish their colour and appearance, the better. For instance, under the main cupola, where the grand reception to the President was held, yellow Asiatics in silk dresses, darker Africans in red woollens, were given prominent seats, and an Iroquois chief with a feather head-dress was by common consent placed in a foremost position. The Exhibition is now sure to be a grand success, and, it must be said, a deserved one. The machinery hall, with the bold and graceful curve of the iron trusses supporting the roof, probably never before equalled in size or proportions, and the numberless attractions everywhere offered to visitors surpass, it is said, all that has been seen before. At the same time it must be confessed that, great as has been the progress made within the past three or four weeks, everything is far behind time, even allowing for the inevitable delay in the opening of exhibitions. The sale of 100f. season tickets to the public, and 25f. to committeemen, reached before the opening of the Exposition a total of 46,000f. A special body of twenty-five police agents in civilian dress has been charged with the duty of looking after pickpockets, and the English police authorities have sent over some of their men, familiar with that class of British artists, to give their French colleagues the benefit of their experience. The first light-fingered gentleman caught inaugurating the Exhibition was exploring a French general's pockets, and said Holland was his native place. The second claimed to be French, and his "pal," also caught, to be English. After this illustrious trio, many pickpockets of various nationalities, among them several women, were arrested, and considerable plunder recovered.

Gazette.

PARTNERSHIPS DISSOLVED.

Clark, H. M., & W. C. Fanner, under the style of De Grave, Short & Co., St. Martin's-le-Grand, City, scale, weight, and measure makers and vendors.

Cubley & Preston, Sheffield, chemists and druggists.

Grace Brothers, Castleford, aërated-water manufacturers.

THE BANKRUPTCY ACT, 1883.

Receiving Order.

Tucker, Edwin, Bristol, importer of sponge and sealing-wax and post-office letter carrier.

First Meetings and Public Examinations.

Benson, George William, Great Portland Street, W., retail chemist and druggist—May 17, 33 Carey Street, Lincoln's Inn; May 29, 34 Lincoln's Inn Fields.

Clarke, Henry Berger, late of Great Tower Street, now of Mincing Lane, City, chemical merchant—May 17, 33 Carey Street, Lincoln's Inn; May 29, 34 Lincoln's Inn Fields.

Adjudication.

Somerville, Thomas Townsend, Sheffield, surgeon.

Notice of Dividend.

Chapman, Levi (trading as Chapman & Co.), Coventry mineral-water manufacturer—first and final div. of 5*s.* 7*d.*, May 10, Official Receiver's office, Coventry.

Application for Debtor's Discharge.

Roberts, Thomas, Holyhead and Brynsiencyn, chemist—May 27, Court House, Bangor.

Orders made on Applications for Discharge.

Marquardt, Charles (trading as Marquardt, Lehzen & Co.), Billiter Square, City, Forest Hill, Kent, and at Calcutta, India, merchant—discharge granted.

Mitcheson, Robert, Spennymoor, chemist and grocer—discharge suspended for one month.

Sneath, Thomas Dixon, Newark, chemist and druggist—discharge suspended for six months.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within two months of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "Trade Marks Journal," May 1, 1889.

"Varniline," on label; for a varnish. By W. Owston, Ambleside, Dartmouth Road, Forest Hill, S.E. 84,664.

"Harvey's 'Rapid' Healer," and "Harvey's 'Perfected' Embrocation or Curbbottle"; for veterinary applications. By Elizabeth G. Bogue (trading as Harvey & Co.), 6 Batchelor's Walk, Dublin. 83,378-9.

"Thiol"; for goods in Classes 2 and 3. By Ichthyol Gesellschaft, Cordes Hermanni & Co., Hamburg. 85,902-3.

"Dawn of Day"; for patent medicines. By J. Coldwell, 19 Buchanan Street, Johnstone, N.B. 80,193.

"Balm of Bethesda," and monogram, on label; for a medicated mixture for tender feet. By R. Terrot, Woodside Manor, Peterborough, and A. G. Little, Oakfield, Tynemouth. 81,980.

"Christia"; for medicated waterproof material. By Thomas Christy, 25 Lime Street, E.C. 82,603.

"Widow Clarke's Blood Medicines," other wording, and portrait; for medicines. By James and Amelia Clarke and Henry Turner (trading as Clarke, Price & Turner), 39 Burne Street, St. Marylebone, London. 83,761.

"Cula"; for medicines. By. F. A. Graham (trading as the "Cula" Company), 4 Mill Lane, Stocton-on-Tees. 84,352.

"Gould's Genuine Hop Compound for Bitters," on label; for hop compound. By S. Gould, medical herbalist, Bradford. 84,730.

"Cream of Malt," and signature; for a chemical substance (Class 3). By Oppenheimer Bros. & Co, Sun Street, Finsbury, E.C. 85,155.

"Lanatta Pills" for pills. By R. M. Rogers, 39 High Street, Doncaster. 85,817.

"Stephens' Blue Black Copying Fluid," "Stephens Black Copying Ink," and "H. C. Stephens' Commercial Black Ink," on labels; for ink. By H. C. Stephens, Aldersgate Street, E.C. 61,688, and 89-91.

The well-known picture representing the baby in a bath who "Won't be happy till he gets it"; for common and perfumed soap. By A. & F. Pears, Great Russell Street, W.C. 73,899, 73,900.

"Tintosse"; for perfumery. By Sapley & Smith, 128 London Wall, E.C. 85,420.

"Colorine" over monogram label; for a preparation for the hair. By. S. W. Chapman, 6 Church Street, Folkestone. 85,485.

"Wild Rose Pot Pourri," and other wording, on label; for perfumery. By Owen Moore & Co., Portland, Maine. 85,565.

"Steriline"; for goods in Class 50, including furniture polish. By Steriline (Limited), 43 Coleman Street, E.C. 85,225.

From the "Trade Marks Journal," May 8, 1889.

"Mallowdown," and figure of a cat holding a bottle and a fiddle; for a cure for chilblains. By Emily Carter, Ovington, Hampshire. 84,972.

"Thomas Wood's Celebrated Food Compound," and figures on a label; for fruit emulsions. By Thomas Wood, Swanley, Kent. 84,973.

"Bayley's Wood Oils"; for a remedy for rheumatism. By C. Bayley, 2 Park Street, Walsall. 85,632.

"Pyro-gestine"; for chemical substances. By Kendall & Co., Australian Avenue, E.C. 86,775.

Cocoa and mustard are the subject of twelve applications for labels (81,937-81,950) by Charles James Barry (trading as C. Barry & Co.), Ropemaker Street, Finsbury, E.C.

"Thomas's The Drop from the Clouds Sauce," and other wording, on label; for a sauce. By H. L. Green (trading as Parnell Thomas), 91 Holly Street, Dalston, E. 83,963.

"Lebert & Prince's Indian Chutney Relish," and other wording, on label; for a chutney relish. By Lebert & Prince, 714 Old Ford Road, Bow, E. 85,256.

For aërated and mineral waters: Rose, thistle, and shamrock design, on label (by Turner & Co., Chorley. 84,585); figure of Peace (by G. & P. Barrie, Dundee. 85,145); monogram (by Standring, Son & Co., 124 Market Street, Manchester. 85,376); figure of a house on a hill-top (R. Hillhouse, Old Kilpatrick. 85,921); figure of a jar (by T. Withered & Son, Marlow. 86,342).

"Thornton's Walnut Extract," and other wording, on round label; for a preparation for the hair. By R. Hovenden & Sons, Berners Street, W. 68,646. Also "Thornton's Walnut Water or Hair Wash," and other wording, on label; for a preparation for the hair. 68,647.

"Gloriola," and signature; for perfumery. By N. Price & Co., 27 Old Bond Street. 75,200.

"Pasta Mack," on floral strap label; for perfumery. By H. Mack. 80,008.

"Carmel," on olive branch, and figure of a man; for olive oil soap. By J. K. Biddiscombe (trading as the Mount Carmel Company), 101 Leadenhall Street, E.C. 85,141.

"Vril"; for goods in Class 50, including furniture cream and plate powder. By J. L. Johnston, 30 Farringdon Street, E.C. 85,724.

Scientific Notes:

On Chemistry, Pharmacy, Botany, Materia Medica, &c., Original, Selected, and Translated.

Test for Essential Oils.

"Eck" founds a process for detecting the oil of pine when used for sophisticating the oil of juniper-berries upon the power of the latter of at once decolourising a very dilute alcoholic solution of iodine, whilst many essential oils do not show this reaction. The method of applying the test is to dissolve a drop of the oil in question in 3 c.c. of alcohol at not less than 90 per cent., and to add a drop of the tincture of iodine. In a check experiment, in which he added directly oil of turpentine to oil of juniper and applied the iodine test as above described, the iodine was nevertheless decolourised. In consequence he distils the oil on the water-bath and applies the test to the first drop which comes over. Iodine is instantly decolourised by oil of peppermint (Mitcham); in a minute by the oils of ginger and juniper; in two minutes by oils of mint and cardamom; in three to eight minutes by oil of mace. The oils of coriander, caraway, turpentine, rue, sassafras, roses, rosemary, orange, aniseed, fennel, angelica, and wormwood do not decolourise iodine.—*Chem. News.* ["Eck" is scarcely on the track.—Ed.]

The Colour-test for Strychine.

Flückiger (*Pharm. Zeitung*) proposes the following solution for testing for strychnine:—0·01 grm. potassium dichromate is dissolved in 5 c.c. of water and mixed with 15 grms. (8·15 c.c.) of sulphuric acid of sp. gr. 1·84 at 15°. When cold the reagent is ready for use. A solid body to be tested for strychnine is moistened with a single drop of this liquid, or the powdered solid is scattered upon the liquid on a porcelain slab, or a saturated solution of the strychnine salt is let flow slowly over the acid, shaking very gently so as to obtain a distinct zone. Certain substances, such as brucine, give a fine red colour with the chromiferous sulphuric acid, and mask the reaction of strychnine. In case of a mixture of brucine and strychnine which does not at once give the strychnine reaction, the substance is placed upon a small moistened filter and chlorine-water is dropped upon it as long as a red colour is thus produced. Dichlorbrucine is thus formed as an amorphous, easily soluble body, which passes rapidly into solution. The undissolved alkaloidal residue gives the reaction of pure strychnine.

Artificial Glucose.

Fischer and Tafel, the Wurzburg chemists, who were the first to synthesise glucose, have recently improved greatly the process whereby it is obtained, so that they have been enabled to obtain it in such quantity that fermentation experiments have been possible; and with beer-yeast this artificial glucose is found to rapidly ferment, evolving abundance of carbonic-acid gas at the ordinary temperature. It reduces Fehling's solution, and only differs from natural dextrose and levulose in being optically inactive, consisting, as it probably does, of a mixture of equal molecules of the right and left handed varieties. Further, by the action of sodium amalgam, it is readily reduced to a compound of the formula $C_6H_{14}O_6$, which crystallises in fine plates and melts at 165°—in fact, possesses all the properties of mannite, $C_6H_8(OH)_6$. Later observations on the same subject by Fischer and F. W. Passmore show that among the products of the condensation of formic aldehyd there is a sugar identical in every respect with alpha-acrose. This observation confirms Baeyer's theory that glucose is formed in plants by the reduction of carbonic acid to formic aldehyd and the condensation of this product.

Alcohol Testing.

In an extended series of experiments which have been completed at Berlin to ascertain the relative values of various tests for alcohol, Professor Sill used two instruments, the "capillarimeter" and "stalagmometer," which may be described. The former is a little instrument, the principle of which is based on the fact that the height attained in a capillary tube by dilute solutions of organic substances, of one and the same series, even when the strength remains the same, decreases very rapidly as the molecular weight of the substance increases. In industrial practice, therefore, the presence of the higher alcohols (higher than vinous alcohol), which constitute the bulk of the fusel and other alcoholic impurities, is rendered manifest by the very appreciable reduction in the capillary height of a solution, of known strength, of the spirit under consideration. The instrument consists of a very narrow tube, with a very finely graduated scale, the readings on which give the capillarimetric height of vinous alcohols reduced to a uniform strength of 20 per cent. The "stalagmometer," or drop-reckoner," is based on the principle that alcohol, of a given strength (as for instance, 20 per cent. measured by volume), when flowing through a very narrow orifice, will form a larger number of drops in proportion as they contain more impurities, so that the number of drops formed will thus serve as a measure of their impurity.

New Tests for Tannic and Gallic Acids.

Mr. S. G. Rawson, B.Sc., states (*Chemical News*) that if a solution of tannic acid be treated with ammonium chloride alone a precipitate falls, but only with extreme slowness, whereas on the addition of ammonia a beautiful white precipitate instantly appears; but this, probably by oxidation, becomes rapidly of a reddish brown colour. With gallic acid no precipitate falls in either a strong or a weak solution, but the liquid becomes of a red colour. One part of tannic acid in 5,000 is readily detected, and, with care, one part in 20,000, or even 50,000, may be detected. There is no advantage in substituting other salts, such as the phosphate, carbonate, or oxalate, for ammonium chloride. With gallic acid, as previously mentioned, no precipitate is formed; but a ring, usually of a greenish colour on its lower surface, is produced, this being recognisable in solutions containing one part of gallic acid in 100,000 of water. Another delicate test for both acids is to add to the solution containing one of them chlorine water and then ammonia, a beautiful red colour being at once produced. With tannic acid the colour is very well marked and distinct, but is not quite so noticeable with gallic acid, for with this acid, as is known, ammonia alone gives a red colour. With a mixture of potassic ferricyanide and ammonia both acids also give a dark red coloured solution. In the case of tannic acid one part in 10,000 of water gives a distinct red colour to the whole of the solution, and even a tenth of this can be detected. Obviously the absence of quinine must be ensured.

Volumetric Determination of Sulphates.

The following method is proposed in the *Bulletin Soc. Chem. Paris* (*Chem. News*):—A solution of barium chromate is made by dissolving in 200 c.c. of distilled water 19·48 grms. of neutral potassium sulphate and 50 to 100 c.c. of pure hydrochloric acid and is poured in slowly, stirring to dissolve the precipitate formed, 24·35 grms. barium chloride previously dissolved. Then make up to 1 litre and filter. Of this solution 50 c.c. precipitate form 0·3 to 0·4 of sulphuric acid. The excess of alkaline chromate involves a deduction as correction in all the readings. This correction may be determined once for all by precipitating in a flask marked at 1,000 c.c. 100 c.c. of the solution with an excess of ammonia, and reducing with the ferrous liquid 100 c.c. of the filtrate mixed with 5 c.c. of pure sulphuric acid. The ferrous liquid is prepared by dissolving 20 grms. double iron and ammonium sulphate and 10 c.c. of pure sulphuric acid in 1 litre of water. The operation is conducted as follows:—1 grm. pure dry potassium sulphate is dissolved in 600 c.c. of water in a flask marked at 1 litre, 100 c.c. of the barium chromate are added and shaken up. When the liquid begins to grow clear it is supersaturated with ammonia, when the liquid becomes of a sulphur yellow. It is filtered, and 100 c.c. of the perfectly clear liquid are taken, and to them are added 5 c.c. of pure sulphuric acid. The solution of iron is dropped in from a burette holding 50 c.c. The liquid turns from red to olive-brown green, and at last bluish green. At this moment little drops of the liquid are taken up with a glass rod and placed upon drops of ferricyanide on a white slab, stopping as soon as there is a blue tint. The solution of ferricyanide must be fresh, and so dilute as to appear colourless. The salt must not be used as a dry powder. The actual determination is performed in the same way. Chlorides and nitrates do not interfere; chlorates must not be present, and phosphates must be previously eliminated.

THE SALICYLATES OF MERCURY, AND THE CHEMISTRY AND THERAPEUTICS OF THE MEDICINAL MERCURIC SALICYLATE.

DR. W. C. CALDWELL, of Chicago, gives in the *Therapeutic Gazette* a very exhaustive account of this class of medicines, based on chemical and clinical experiments. There are six distinct compounds of mercury and salicylic acid, viz.:—

Mercurous salicylate,

$$C_6H_4\left\langle\begin{matrix}OH\\CO_2\end{matrix}\right. - Hg - Hg - \left.\begin{matrix}OH\\CO_2\end{matrix}\right\rangle C_6H_4.$$

Neutral mercurous salicylate,

$$C_6H_4\left\langle\begin{matrix}O - Hg - Hg - O\\CO_2 - Hg - Hg - CO_2\end{matrix}\right\rangle C_6H_4.$$

Mercuric salicylate,

$$C_6H_4\left\langle\begin{matrix}OH\\CO_2\end{matrix}\right. - Hg - \left.\begin{matrix}OH\\CO_2\end{matrix}\right\rangle C_6H_4.$$

Neutral mercuric salicylate,

$$C_6H_4\left\langle\begin{matrix}O - Hg - O\\CO_2 - Hg - CO_2\end{matrix}\right\rangle C_6H_4.$$

Neutral mercuric salicylate, Heyden's formula,

$$C_6H_4\left\langle\begin{matrix}O\\CO_2\end{matrix}\right\rangle Hg.$$

Neutral mercuric salicylate, Fischer's formula,

$$C_6H_3\left\langle\begin{matrix}OH\\CO_2\end{matrix}\right\rangle Hg.$$

In this there is a rearrangement of the atoms in the molecule of Heyden, but it is defective, as the radical OH is univalent, instead of bivalent, as represented in the graphic formula of Fischer.

The acid salicylates have reactions similar to the inorganic salts of mercury; thus the mercurous salt is, like calomel, insoluble in water, and is blackened by alkalies; the mercuric salt is soluble to a slight extent, and gives a yellow precipitate with the alkalies. Neutral mercurous salicylate the author did not study, but the neutral mercuric salt he found to be insoluble in water and hydrochloric acid, and freely soluble in alkalies. This is the salt (Heyden's formula) which is used in medicine, and which was the subject of the clinical experiments. It is described in "The Art of Dispensing."

The salt is freely soluble in solutions of ammonium citrate, sodium chloride, and sodium carbonate, and either of these solutions may be used medicinally. It is noteworthy that with iron salts of all kinds the salicylate is incompatible, and although a solution of the salt in sodium carbonate is permanent, the bicarbonate solution, after standing several weeks, decomposes. As to the solution with sodium chloride, the author noticed that, although lime-water does not affect it, a copper wire heated in it is soon covered with mercury, which does not occur in a carbonate solution acidified with salicylic acid. This suggests the probability that the sodium chloride renders the salicylate less stable, and it may be that the sodium chloride in the digestive tract and blood may convert it into the bichloride, just as calomel is converted into the bichloride.

The administration of this solution should, therefore, be made with caution. Similarly, regarding the solution in potassium iodide, it was noticed that in time mercuric iodide is formed, and it was deemed advisable to test this point clinically, 1-grain doses of the salicylate being given after meals to patients who were taking 10-grain doses of potassium iodide before meals, and in all cases salivation was produced before twelve doses were taken—indeed, three doses were sufficient to produce salivation in some cases. The inference is that mercuric iodide is formed in the system, probably in the blood.

Experiments on albumen showed that the salicylate is converted into the albuminate much more slowly than the bichloride, and, besides, is probably not at all absorbed from the acid stomach; hence it is probable that a much larger part of it enters the duodenum as the salicylate. For this reason it would appear that it would be better adapted for intestinal antisepsis than the bichloride, which very likely produces most of its action after it has entered the blood during elimination-contact.

As an antiseptic it is thought that it may be used, along with boric acid as a diluent, for arresting the putrefaction of wounds and ulcers. The author proceeds to comment upon the action of the salt on artificial digestion (there is slight retardation), on the living tissues, its absorption, contact action, and concludes that it is superior medicinally to the bichloride for the following reasons:—

(1) It is probably not absorbed from an acid membrane, and therefore produces less derangement of the stomach. (2) The mercury being combined with an organic radical, it produces less irritation during both first- and elimination-contact actions than the bichloride. (3) The salicylate contains less mercury and acts slower; it has less action on albumen and on bacteria of putrefaction, and far less on digestion. (4) It passes through the stomach to the duodenum, and, therefore, is better adapted for an intestinal antiseptic.

The salt should not be prescribed with mineral salts of the heavy metals, with iodide of potassium (unless in small doses), with drugs requiring an acid menstruum for solution, and as chemical change occurs when combined with muriate of cocaine, they should not be given together.

SUBIODIDE OF BISMUTH.

MR. CHARLES E. GREEN, in an inaugural essay to the Maryland College of Pharmacy, criticises the various methods which have been suggested for making subiodide of bismuth, a salt which has been used as a substitute for iodoform. Commercial samples were found to vary considerably in physical appearance, a circumstance due to the fact that they were mixtures of the subiodide proper and the subnitrate. Hence an examination of the methods of preparation which have been proposed was made, and it was found that J. W. England's precipitation process yielded a salt of "fairly good colour," but "cakey," and containing 97·65 per cent. of BiOI. Rother's method gave a dark red and heavy salt containing 95·3 per cent. of BiOI and 3-4 per cent. $BiONO_3, H_2O$. This process was found to be tedious. Frank X. Moerk's process (interaction of hydriodic acid and bismuth hydroxide) yielded an entirely unsatisfactory product, scarcely pulverisable, and containing 92·9 per cent. of BiOI with the usual quantities of nitrate. Another process of Moerk's, in which potassium iodide and bismuth subnitrate are made to react in presence of water, was found to give even worse results, the salt containing from 88 to 95 per cent. of BiOI. Mr. Greene submits the following method of his own which affords a bismuth subiodide of a very bright red colour, in light and bulky fine powder, and containing 99 44 per cent. of BiOI and ·35 per cent. of $BiONO_3, H_2O$:—Dissolve 409 grains of bismuth subnitrate in 1 fl. oz. of nitric acid with the aid of heat; then carefully dilute this solution with water as long as no precipitate is formed, or until opalescent. Add to this 221 grains of potassium iodide dissolved in about 16 fl. oz. of cold water; agitate thoroughly, and then apply heat to about 80°–85° C. The mixture at first assumes a black colour, growing gradually brownish, becoming still lighter as it is agitated, and under the influence of moderate heat and violent agitation it is finally changed from a light brown to a brilliant red. The agitation is continued for a few moments longer that the reaction may be completed. The precipitate is washed by decantation, drained upon a plain filter, and dried at 100° C. The yield should be about 470 grains.

DRAWING from nature.—Extracting teeth.

NUX VOMICA SEED.—Dr. A. Tschirch, writing from Buitenzorg, Java, provisionally announces in *Pharmaceutische Centralhalle* that he has definitely discovered that the funiculus of the nux vomica seed is situated in the centre of the disc from which the rays of silky hairs proceed, and the hilum is not placed on the edge. He promises a complete paper on the subject, which is one that has been enveloped in some doubt.

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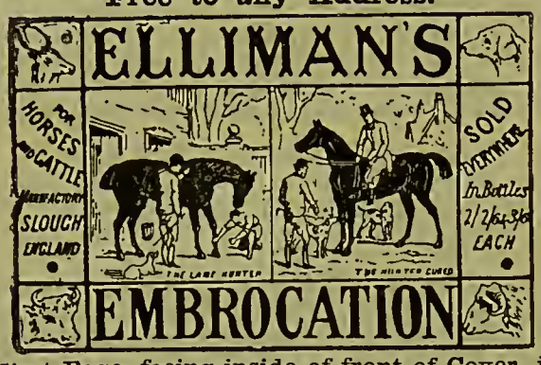

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EDITORIAL NOTES.

THE PHARMACEUTICAL COUNCIL AND ITS POLICY.

The forty-eighth annual report of the Pharmaceutical Council, which is to be submitted to the members of the Society next week, offers little basis for discussion in regard to the policy of its authors. In none of its paragraphs does it venture beyond the mere record of facts, and its critics will have to complain, if they complain of it at all, in respect of what it omits to say rather than in reference to what it does announce. The opening reference to the financial statement suggests by far the most important of the considerations with which the members have to deal. We commented on these accounts at some length last week, and showed that the deficit which is this year presented is not very likely to be remedied in the future, or, at any rate, until those ground-rents of problematical value fall in for the benefit of the funds. The excess of expenditure over revenue amounts to 64*l.* 2*s.* 3*d.* To explain this the report tells us that the item of 176*l.* 12*s.* 8*d.* charged for "furniture (including furniture for new building)" is abnormal; and it is implied that the Council have manifested a certain degree of heroism in debiting this charge to current account, and not lumping it into capital. As they seem to have capitalised the whole of the builders' charges just as they received them, we do not quite see why they should have been squeamish about the

remaining details. No one can imagine that the building as it now stands, even with its improved address from Pied Bull Yard to Galen Place, would ever realise anything like the 10,031*l.* 4*s.* 8*d.* at which it appears among the Society's assets.

It is on those accounts that serious discussion ought to concentrate itself; they alone afford a suggestion of the policy or the no-policy of the past Council. As we read them, they indicate the purpose of the Council, consistently aimed at, to take a place among the satellites of the Royal Society, rather than the position of leader of the pharmaceutical body in all its interests, which so many of us would like to see them assume and occupy.

As we have said, the remainder of the report offers but little opportunity for criticism. It records the routine work of the Council, the extent and usefulness of which no one questions. Proper allusion is made to the resolution passed last October to the effect that carbolic acid ought to be deemed a poison within the meaning of the Pharmacy Act, 1868. We trust that the new Council will again press this resolution on the Privy Council, and by such means as are available on public opinion, until confirmation of the resolution is obtained. The names of the prominent vivisectors who have aided the work of the Research Laboratory are somewhat defiantly paraded, perhaps without any subterranean intention. The statement in regard to the Pharmacy Acts Amendment Bill, that "the same Bill as was submitted to Parliament last year" has been reintroduced, is not entirely correct. Parliament includes the House of Commons, and the Bill introduced this year is not the same as the one which was submitted to the House of Commons last year. Its most important clause has been omitted.

We suppose the action of the Council in regard to railway rates is to be taken seriously, and perhaps it should be regarded as evidence of an earnest desire to lead a better life in future. We have no desire to extinguish the faint sparks of attention to trade interests thus manifested, but, as far as we yet know, the Council have not done any of the hard work of preparing objections; and we are not quite enamoured of the method which they have occasionally followed of reaping credit where they have sown no labour. A more practical evidence of the development of the commercial spirit among them is the announcement officially put forward in the report, that they will soon have No. 15 Bloomsbury Square to let.

From the report published in another part of this journal it will be seen that we have made a not very successful attempt to ascertain for the benefit of voters the opinions of the candidates for the Council on some of the prominent questions of pharmaceutical politics. We have to thank Messrs. Allen, Broad, Cross, Leigh, Nichol, and Watt for their courtesy in replying. Certain of these gentlemen do not agree with us as to the desirability of laying their views before the constituency. We do not wish to quarrel with this eccentric opinion; we recognise that it is expressed with courage and politeness. The candidates who have not thought fit to reply to us are Messrs. Abraham, Bottle, Butt, Carteighe, Greenish, Hills, Martin, Martindale, Newsholme, Schacht, and Southall. We can quite understand that some of these gentlemen, being accustomed to get their opinions ready formulated for them from the chair, find it difficult to ascertain exactly, and without consultation, what views they actually do hold; the rest, we presume, hold THE CHEMIST AND DRUGGIST in such excessive respect that they have not found it possible in the short space of time allowed to frame their responses in a style worthy of the brilliant literature which might be expected to surround their communications.

A PROBABLE IRISH PHARMACY BILL.

WE have pleasure in announcing that there is peace in Ireland, and harmony between the pharmaceutical body and their opponents of last year, the chemists and druggists, or chemists, or druggists. The Bill introduced last year by the Pharmaceutical Council, after experiencing unusual luck in its earlier stages, came hopelessly to grief before it could get into committee of the House of Commons, but at the eleventh hour, too late for last session, it was whipped into a form which made it a good, honest, useful measure. It would be a pity, in view of the future of Irish pharmacy, if the Bill thus created should be abandoned or lost, and we are glad to learn that there is every probability that it will shortly be submitted to Parliament with the united support of the several sections of the trade in Ireland.

At the last meeting of the Irish Pharmaceutical Council the question came up for consideration whether anything was to be done this year in the way of legislation. It soon appeared that this question did not rest for decision with the Council exclusively. The chemists and druggists of Ireland were not disposed to drop the advantage they had secured at the end of last year, and had got their Bill ready for introduction. The Council were invited to co-operate; and perhaps they might by conference secure some slight modifications of the Bill in their own favour. The most combative among them could hardly advocate direct opposition to provisions they had agreed to only a few months since, and, after a few petulant remarks, not unnatural under the circumstances, the wisdom of combining with the chemists and druggists as cordially as possible was generally recognised. According to our further information, representatives of the Pharmaceutical Council and of the Chemists' and Druggists' Association met in Dublin, on Tuesday last, in conference. An agreement, substantially, we believe, on the lines of the old Bill, was arrived at, and the Council will be called together on Monday next to confirm or reject the terms arranged. If the Bill goes forward, as in all probability it will, it will express the united desire of the various sections of the trade in Ireland, it will offer enhanced conveniences to the public, by establishing the two grades of pharmacists, which the country evidently requires, and, as Mr. Brunker himself points out, will ensure a stronger and richer Society, and a pharmacy law of much clearer and more definite character than the unfortunate and unworkable Act which it is not found possible to administer.

DIARRHŒA AND DIPHTHERIA.

THE medical staff of the Local Government Board is evincing a remarkable activity—elaborate reports on epidemics or on the distribution of special diseases follow each other with unprecedented rapidity. The latest consists of reports on diarrhœa by Dr. Ballard, and on diphtheria by Dr. G. B. Longstaffe. These reports are illustrated by lithographed diagrams, and the volume containing them covers over 150 foolscap pages. It is sold by the Queen's printers at 8*s.*, and is a document of the highest importance to sanitarians.

Dr. Ballard's investigations on the causation of diarrhœa have extended over the last eight years. Leicester and Islington are the scenes where his inquiries have been principally carried on, and though medical practitioners all over the country were invited to assist in the investigation, it is surprising to find how meagre was the response, when it was discovered that the assistance requested involved a cer

tain amount of work and no pay. At first promises of assistance came from 130 practitioners scattered over the country. Of these a large number forgot their promises straightway; others who began to record their cases soon abandoned the unprofitable task, another set misunderstood their instructions, and ultimately only three remained from whom contributions of real service were obtained. One of these, Dr. Bruce Low, then medical officer of health at Helmsley, in Yorkshire, has since been appointed to a Government position, perhaps as a reward for his faithfulness. The other reports came from Stourbridge and Redditch. Drs. Klein and Cash have been associated with Dr. Ballard for the purpose of the requisite pathological and chemical studies incidental to the inquiry.

Diarrhœa is the nominal cause of one-tenth of all deaths of children under 5 years of age. It is therefore a most promising field for sanitary investigation. It cannot be expected that any great progress should have been made by the inquiries here recorded, abundant though they are, in the direction of reducing this great mortality; but much has been accomplished if, as may be hoped, the way has been indicated where the cause of the disease may be traced. Dr. Ballard has a rather Johnsonic style of writing, and his report is studded with such gems of commonplace as the statement that "Diarrhœal mortality is the sum of two factors, namely, prevalence and fatality. Both of these differ in the same place in different years and different periods of the same year;" which seems to be about equivalent to saying that the mortality depends on the number of deaths. It is well, however, to begin at the beginning; and having laid down the axiom we have quoted, Dr. Ballard proceeds to establish the generally known fact that the mortality varies with the temperature. But he does not think it is directly influenced by the atmospheric temperature. As far as his statistics go he finds its variations to correspond more constantly with the temperature of the earth. His next observation is that much depends on the soil on which the houses of a locality are built, a rock being the ideal and sand the worst sanitary condition for diarrhœa. Dampness in the soil has also an influence; and the free circulation of air in and around dwellings tends to check the prevalence of the complaint. All these circumstances suggest the existence of an organic growth associated with diarrhœa, and it is when the conditions are especially favourable for the development of this organism that an epidemic results. From this foundation, not altogether original, but now for the first time based on exact statistics, Dr. Ballard proceeds to suggest the explanation of what may be called the secondary causes of diarrhœa. For instance, it is a general observation that children fed by the bottle are much more liable to the disease than children fed from the breast; and certain fruits have a special reputation in connection with the causation of diarrhœa. But Dr. Ballard seems to believe that it is not the fruit nor the food in the bottle which has inherent diarrhœa-producing properties; but that these are often suitable media for conveying the organic poison which is the disease-producer. Hence he strongly recommends that all food should be kept in cool, dry, airy pantries, that milk should be boiled on being received into a house, and, of course, he advocates, besides, many precautions to promote better ventilation in and around houses, such as a prohibition of back-to-back-built dwellings, concrete foundations, and so on. From a medical point of view his remarks on the nature of the disease are of considerable importance. He regards it as a specific disease of which the diarrhœal discharge is only a usual but not quite an invariable symptom. The observations recorded go to show that the kidneys are as certainly affected by this disease as the intestines, and Dr. Ballard believes it to be highly probable that many cases of Bright's diseas have originated in an attack of diarrhœa.

Dr. Longstaffe's treatise on the geographical distribution of diphtheria is almost purely statistical. He compares the diphtherial mortality of the registration districts of England and Wales with the relative density of population in those districts, and comes to the conclusion that where population is dense there is less diphtheria, and that the disease flourishes most in sparsely-populated regions. Taking a period of six years, it is found that for the whole of England and Wales the death-rates for dense, medium, and sparse districts are 123, 182, and 248 diphtheria deaths per million

AVERAGE DIPHTHERIA DEATH RATES.
Twenty six years 1855-80.
(England & Wales taken as 100)

living respectively. The map printed above is a reduced copy of one supplied by Dr. Longstaffe, on which the shades of blackness indicate by their depth the comparative rates of mortality. It will be seen at a glance that while the sparsely-populated Eastern Counties are generally very dark, London, Lancashire, and other thickly-populated districts are comparatively light; that the West Riding of Yorkshire is the most fortunate division of that county; and so on. The statistical results thus indicated are to a considerable extent borne out by more minute analysis of the registration figures. The practical deduction suggested by these facts is, in Dr. Longstaffe's opinion, that the cause, or causes, of diphtheria should not be sought for primarily in any high development of civilisation, such as sewers, but rather in some condition associated with a more primitive mode of life. Again, privies and ash-pits can hardly be important agents in breeding or disseminating the disease, or we should expect to find diphtheria exceptionally prevalent in those northern towns where such nuisances reach their worst, whereas the contrary is the case. On the other hand, low vegetable organisms developed in damp dwellings would perhaps fit in with the facts brought forward; or, again, some evil special to shallow wells or other primitive sources

of water supply. The line of investigation, however, which seems most promising lies in comparative pathology. The peasantry live on terms of great intimacy with domestic animals, more particularly cows, sheep, pigs, and poultry (including pigeons). Some little-known disease of some one or other of these creatures may be capable of inducing in men or women brought into frequent and close contact with them a trivial "membranous sore throat"; then, under suitable conditions of recipient and environment, the more generally recognised form of the disease, "true diphtheria," or, as it used to be called, "cynanche maligna," may result. The poison, perhaps gathering intensity and infectiveness, may then be conveyed into towns by farm produce, such as milk, cream, or poultry, conceivably by eggs, meat, or vegetables; and, lastly, through the persons first infected, the sources of water supply, or the public sewers may get poisoned, and so indirectly aid in the spread of the disease.

Cocoanut Oil from Cuba. It is five years since Cuban cocoanut oil was offered for sale in the New York market, says the *Oil, Paint, and Drug Reporter*, and the trade was under the impression that it had retired from commerce for good, but fruit vessels from Cuba have recently discharged at this port nearly one thousand barrels of the oil, which would seem to indicate that its importation was resumed to compete with Ceylon oil. It is stated, however, that the oil was brought under a misapprehension, and that the low prices prevailing will discourage further importations. Havana may be a better market than the United States at the present time, but its comparatively close proximity, and the fact that the Cuban industry has been rejuvenated with a new hydraulic process by a Frenchman, will not have a beneficial effect on the local market for cocoanut oil in the future.

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Artificial Arabin. Professor Ballo, of Buda Pesth, has succeeded while attempting to reproduce the conditions under which the acids of the vegetable world are reduced by chlorophyll in synthesising a carbohydrate of the empirical composition $C_6H_{10}O_5$, which possesses properties very closely resembling those of the arabin of gum arabic. It was assumed that the iron of chlorophyll is present in the ferrous state, and tartaric was the acid upon which operations were commenced. About equal quantities of tartaric acid and ferrous sulphate were dissolved in a minimum bulk of water, and the solution was warmed upon a water-bath, until a greyish-yellow precipitate began to separate, when the whole was evaporated until it solidified on cooling. The mass was extracted with alcohol, evaporated, neutralised with milk of lime, and filtered. During the evaporation of the filtrate it became viscid, and a sticky mass was left. On allowing the concentrated syrup to cool a calcium salt readily crystallised out, yielding on analysis numbers pointing to the formula $(C_6H_9O_5)_2Ca + 9H_2O$. From this the free carbohydrate was readily obtained, and was purified by treating with alcohol and ether. This iso-arabin, as it is called, is an almost colourless syrup, readily mixing with water. It does not reduce Fehling's solution, but rotates the plane of polarisation to the right. In addition to iso-arabin itself a small quantity of its hydrate, $C_6H_{10}O_5 + H_2O$, is also formed by the action of ferrous sulphate upon tartaric acid, and separates out in crystals from the alcoholic washings of the crude iso-arabin. Natural arabin itself forms a similar hydrate, the precipitate formed by adding hydrochloric acid and alcohol to a solution of gum arabic, when dried at 100° C., possessing this composition.

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Sea-boiler Deposits. "The Chemistry of Marine-boiler Incrustations" was the subject of a paper read by Professor Vivian B. Lewes, F.C.S., &c, which was read at the recent meeting of the Institute of Naval Architects. There are some points in the paper worth mentioning in these pages. First, as to the solid constituents of sea-water. These are sodium chloride (2·5 per cent.), calcium sulphate and carbonate, and magnesium carbonate, chloride, and sulphate. The normal specific gravity of sea-water is 1·027. On concentration to sp. gr. 1·050, the only solid constituents which are deposited are the two carbonates, and these, with calcium sulphate, entirely disappear when the water reaches a density of 1·225, the sodium chloride meanwhile having risen to about 24 per cent., and the magnesium chloride and sulphate having also increased in the same ratio. Strange to say, however, the deposit does not have the theoretical composition—a fact due to the influence of the high pressure of the boilers. An incrustation showed 90·84 per cent. of calcium sulphate, 0·75 per cent. of magnesium hydrate, 1·11 per cent. of copper carbonate, together with silica, iron, alumina, &c. The magnesium hydrate is supposed to be formed by double decomposition of the magnesium chloride and calcium carbonate. This explains why calcium carbonate is never found in the deposit. The copper deposit is supposed to arise from the action of the distilled water from the surface upon the brass and copper tubes of the boiler. The copper deposits are also only found on the under side of the scale that is in contact with the metal of the boiler-tubes, showing that in all probability it had been deposited, as suggested, from the water in the boiler, and in contact with the iron would set up galvanic action and tend to produce pitting. After discussing the various suggestions regarding the prevention of boiler incrustation, Professor Lewes arrives at the conclusion that the best plan is to treat every ton of sea-water with 40 lbs. of soda crystals, then heat up in a separate apparatus by passing through the solution superheated steam. The result is that magnesium and calcium carbonates are precipitated quickly, and the water, after being forced through filtering-frames into the hot well of the boiler, is ready for use.

A FELINE PROTEST.

THIS is not a fable, but a fact. Our artist, passing through the Galen Place Laboratories the other day, found puss in this position. He came to the conclusion, not unnatural in the circumstances, that she had heard of the Vivisection Society's activity.

A CANDIDATE at a recent examination rendered *pro re natâ* "before childbirth."

CAMPHOR liquefies with chloral, thymol, phenol, beta naphthol, resorcin, and pyrogallic acid; but not with oxalic and salicylic acids, naphthalin, hydrochinon, acetanilid, betol, salol, cumarin, iodoform, and acetate of lead.

Medical Gleanings.

Camphorated Naphthol.

One part of naphthol and two parts of camphor rubbed together form a liquid which has been found to be an excellent antiseptic application to wounds and ulcers, and is said to clean off the false membrane in diphtheria. This observation is of value as extending the use of a powerful antiseptic, the uses of which are limited owing to its comparatively insoluble nature. It would be interesting to know, however, to what extent the liquid owes its antiseptic properties to camphor.

Curing Asthma.

The "Buffalo Asthmatic Institute" is very successful in its treatment of asthma, and it has prospered to such a degree that it has opened offices in New York city. The offices are always filled with patients, and they all bear testimony to the wonderful good done them. The head of the affair is Dr. P. Harold Hayes, a graduate of one of the leading American schools. One of Dr. Graham Tull's (Philadelphia) patients was cured by the Institute, and this led him to get the medicines examined. These were a box of pills (aperient), a box of capsules (quinine gr. ij.), to be taken when catching cold. One of the bottles contained a stomachic to be taken before meals, for the avowed purpose of keeping the stomach in good condition; another bottle held "Asthma Cure," and was to be taken over a period of about two years (with intermissions) in bad cases. This was found to be fluid extract of *Euphorbia pilulifera.* A third bottle was evidently nitrite of amyl in glycerine, 30 drops to be taken at the beginning of an acute attack, and not to be repeated but once without consulting the Institute. By these means has the fame of the Institute been founded.

Xerostomia, or Dry Mouth.

Mr. George Foy, F.R.C.S., gives particulars in the *Medical Press* of a case of this kind, which he successfully treated with the following mixture :—

Tinct. nucis vomicæ..	gtt. v.
Sodæ tartaratæ	ʒss.
Tr. zingiberis	gtt. v.
Infusi sennæ, q.s. ad..	℥ss.
,, gentianæ, q.s. ad	℥ss.

M. Haustus ter die, antecibum, sumendus.

The prescription gave the best results.

Digitalis as a Remedy.

Physicians who have made a special study of the action of digitalis have expressed their dissatisfaction with the various galenical preparations of the drug. Amongst them Huchard considers a cold maceration to be better than the infusion. This is made by macerating 25 to 50 centigrammes of digitalis in powder, in 300 grammes of cold water for twelve hours; then filter carefully, in order to get rid of the powdered digitalis, which is capable of producing nausea and vomiting. The maceration may be sweetened with any agreeable syrup. The above quantity should be taken in five or six doses during the day, between meals. It should be prescribed in diminishing doses; thus, 40 centigrammes the first day, 30 centigrammes the second, 20 centigrammes the third, &c. As a rule digitalis should be suspended after four or five days' use.

The Rush after New Remedies.

The *Lancet* gives a note of warning regarding the use of new remedies, which pharmacists who have the relics of bygone days on their hands will read with pleasure. The tendency of modern therapeutics, says our contemporary, is to seek restlessly and continuously for some new thing, discarding as useless much that has stood the test of time. And for this the medical profession is not solely to blame. The craze for domestic medicine has been such that people who read their prescriptions frequently express lack of confidence in the skill of their adviser on finding that simple well-known remedies have been ordered. The science of therapeutics necessarily knows no bounds, but as a science it certainly suffers from an accumulation of hasty observations and imperfectly digested facts.

Subcutaneous Use of Morphine.

A discussion recently took place at the Leeds and West Riding Medico-Chirurgical Society regarding the maximum dose of morphine which may safely be used subcutaneously. A large number of medical men spoke, and it is astonishing how freely it was admitted that great danger often follows the use of morphine in this way. There appeared to be a practical unanimity that a ½-grain dose of morphine was the largest that should be given in any circumstances; that even ⅓ grain ought not to be given to a patient without due inquiry as to idiosyncrasy, and a reasonable certainty that the kidneys, the heart, and the respiratory apparatus were also either fairly sound or not diseased in such a manner as to be paralysed or seriously hampered by the drug.

Agaric Acid.

This acid is extolled by Professor Hofmeister as an anhydrotic. The pure acid is a dibasic, triatomic homologue, of the malic acid series, having the formula

$$C_{14}H_{27}(OH)\begin{cases} CO\ OH \\ CO\ OH. \end{cases}$$

It is slightly soluble in cold, and more soluble in boiling, water. The neutral alkaline salts dissolve readily, and, like the salts of the higher fatty acids, easily break up in solution into free acid and basic salt. It is a powerful irritant, and injected under the skin it causes intense pain, inflammation, and suppuration. When swallowed large doses produce vomiting and diarrhœa. As little as 1½ gr. causes slight temporary nausea and signs of intoxication. Half a grain is a safe dose, and produces in phthisical patients a decided decrease in the amount of perspiration, which continues for twenty-four hours.

Saccharin as a Medicine.

Although some French physicians have strongly protested against the use of saccharin as a food, they seem to be enamoured of it as a medicine, and it is said to be of real value in some cases. One medical man has used it with success in cases of aphthæ dependent upon measles. On painting the aphthæ with a solution of saccharin the plates disappear within one to three days. The stock solution is composed of 1 gramme of saccharin in 50 grammes of alcohol. Add a teaspoonsful of this solution to half a tumblerful of water, and apply with a camel's-hair brush five times a day. It is unnecessary to use more concentrated preparations.

Extractum Filicis Maris.

A Pharmacist reports to the *American Journal of Pharmacy* that he has succeeded in getting therapeutic tests made with the sediment and the clear portion of this extract. The oil was separated with petroleum spirit, in which the resinous or sediment portion of the extract was insoluble. A dose of the oil (how much is not stated) was given at 6 A.M., and at 8 A.M. an ounce of castor oil was given. Within eight hours 15 feet of tapeworm, with the head, were passed. At another time a different patient got a dose of the sediment in much the same manner as the oil was given, the result being that 14 yards of tapeworm were passed. "This would show," says the author, "that both the sediment and the overlying oil possess active properties, the sediment being as active as, if not more so than, the oil, and that it could be separated from the nauseating oil and administered with the same result, as from a dose of the oil and resin. It has the additional advantage of greater convenience, as the capsules could be filled and kept in stock."

The Use of Beer-yeast in Medicine

has chiefly been confined to external applications. But from the account sent home by Dr. Herr from Algiers, it would seem to be capable of internal use and with good results. He states that he has employed it with great success for the cure of scurvy. The doses were from 1 to 3 grammes to children under 3 years, from 6 to 8 grammes from 3 to 10 years, and from 10 to 15 grammes for adults, to be taken every two hours. He also obtained good results in the treatment of purpura, dysentery, tuberculosis, and particularly in diphtheria.

Foreign and Colonial.

ILLEGAL SALE OF MEDICINE.—The chemists and druggists and the proprietors of dispensaries in Bangalore have resolved to submit a petition to Colonel H. M. S. Magrath, district magistrate and collector of the station, praying that petty native shopkeepers be prohibited from selling medicines. The injustice done to the petitioners is apparent. They have not only to pay for a licence, but keep up a large establishment. Petty native shopkeepers, it has also been represented, are not aware of the property of the drugs they dispose of, and in more instances than one have sold poisons on the representation being made to them that it is required to kill dogs or rats.

MYSTERIOUS DEATH OF A MELBOURNE CHEMIST.—Mr. Henry Davy, a well-known chemist, at 250 Elizabeth Street, Melbourne, has died in a mysterious manner, and, according to the last mail's news, the report of his death was exciting much attention. On going to business in the morning one of his assistants found the body of Mr. Davy lying on the table in a back room. The deceased was dressed, with the exception of his coat, and appeared to have been dead some hours. No sign of violence was apparent, nor was anything discovered in the room to bear out the theory of suicide by poison. Mr. Davy was 43 years of age, and a married man. No one sleeps in the house, but as sets of keys were in the possession of the manager (Mr. Robert Beddome), the assistant (Mr. Thomas Cowl), and the deceased, it was possible for either of the three to enter the shop at any hour of the night. Mr. Davy last visited the shop on the Monday morning prior to the Thursday upon which he was found dead, at about 11.30, and the assistant heard nothing of him until about the same hour on Wednesday, when he sent a telephone message to the effect that he was going away to Geelong. Instead of going to Geelong, however, Mr. Davy was said, by a barmaid at an hotel close by his shop, to have been there that evening in company with Mr. Gray, also a chemist. Mr. Gray at first denied this visit, but afterwards said that if he had been there with the deceased he had no recollection of the circumstance. According to him, he met the deceased soon after ten o'clock in the billiard-room at the Port Phillip Club Hotel, and they both joined with some friends in a game of pool. After a little time Mr. Davy ceased playing, but the others played on until closing time, when the marker called his attention to the fact that Mr. Davy was asleep on a sofa. Mr. Gray woke him up, and the two walked together to the corner of Bourke and Swanston Streets, where Mr. Davy got into a cab and said good night. The medical evidence given at the inquest, after a post-mortem had been made, was to the effect that death was due to asphyxia. How it was caused no one knows, and it is considered a remarkable circumstance that the doors of the rooms leading into the one where the body was found were all carefully locked, as the assistants had left them the night before.

BANKRUPTCY REPORT.

Re ABRAHAM MOORE, Union Street, Wednesbury, Chemist and Druggist.

A MEETING of the creditors of this debtor was held on Tuesday at the offices of the Official Receiver, Wolverhampton. The debtor attributed his failure to ill-health, severe competition, bad trade, and insufficient receipts to pay expenses. The statement of affairs showed liabilities 195*l.* 14*s.* 9*d*, and assets 5*l.* 5*s.* The assets comprise stock in trade (10*s.*), and machinery, trade fixtures, fittings, utensils, &c. (5*l.*), all estimated to produce, as stated, 5*l.* 5*s.* On the same day the debtor came up for his public examination before Mr. Registrar Saunders. In reply to the Official Receiver the debtor stated that prior to 1860 he was a surgeon's assistant, and then commenced business as a chemist in Union Street, Wednesbury, with a capital of 200*l.*, left him by his father. In 1862 he removed to High Street, and in the same year filed a petition in the Birmingham Bankruptcy Court, obtaining his discharge, but not knowing what dividend was paid. He then obtained a situation as office-clerk in Manchester and had subsequently six different situations as office-clerk, &c., until April, 1885, when he restarted business as a chemist in Union Street, Wednesbury. In September, 1887, he removed to Hall Fields, Brodley, and in January, 1889, removed to his present shop in Union Street, Wednesbury. He had kept no books of accounts. The examination was adjourned for a week.

Following is a list of the creditors:—

	£	s.	d.
Ayrton & Saunders, druggists' sundriesmen, Liverpool ..	3	11	9
Great Tower Street Tea Company, London	10	0	2
Harris, P., & Co., druggists, Birmingham	13	10	0
Hollins, James, financial agent, Edgbaston	17	14	4
Potter & Clarke, druggists, Wiston Street, London ..	18	3	8
Star Loan Company, Wolverhampton	13	9	5

EXPLOSIVES.

MR. C. NAPIER HAKE, F.I.C., read a paper on Monday evening on the subject of explosives, before the Society of Chemical Industry, Burlington House. Professor Dewar, F.R.S., occupied the chair. Having glanced briefly at the past history of the subject, the author pointed out that a new period might be said to have commenced with the discovery of gun-cotton some forty years ago. It was eagerly taken up at the time, but was abandoned after twenty years of severe testing, during which period disasters occurred owing to imperfect knowledge of its chemical properties and to the want of good methods of manufacture. Nitro-glycerine then appeared, and for the same reasons was also in time laid aside. The patient researches of Sir Frederick Abel as regards gun-cotton and of Mr. Alfred Nobel as regards nitro-glycerine brought those explosives under control. The application of the principle of detonation to these explosives was the finishing touch of a great work. Mr. Hake pointed out that a dynamite cartridge one foot in length occupies only 1–24,000th part of a second in explosion. At this rate a ton of dynamite cartridge about $\frac{7}{8}$in. in diameter, placed end to end, and measuring one mile in length, would be consumed in a quarter of a second by a detonating cartridge at each end. A similar train of dynamite, if simply ignited, would occupy several minutes in its combustion. The author then referred generally to the theory of the subject, after which he entered upon its practical consideration. He pointed out that although in Major Cundill's "Dictionary of Explosives" over 400 varieties were recorded, very few of these had come into practical use. Referring to the rapid development of the trade in modern high explosives since the Explosives Act of 1875 came into force, Mr. Hake showed with what foresight that Act had been framed. The safety of those engaged in the manufacture of explosives had been distinctly promoted as well as the interests of commerce. The rapid growth of the explosives industry since 1875 was shown by reference to the annual reports compiled by Colonel Majendie, Her Majesty's Chief Inspector of Explosives, and his colleagues at the Home Office. The author concluded by stating that no country in the world could be said to possess an Explosives Act so far-reaching and so efficiently carried out as Great Britain. Nor could any country boast of such a high standard of manufacture as regards the purity, safety, and strength of its explosives.

A SUBSTITUTE FOR MUSK.—Messrs. Schauffer and Hupfeld have patented a process for the manufacture, by chemical means, of a substitute for musk. They take 3 kilos. of meta-xylol with 2 kilos. of isobutyl alcohol, add 9 kilos. of chlorate of zinc, and heat the whole at a temperature of 220° to 240°, until the pressure, which at first rises at the rate of 25 or even 29 atmospheres, has descended to below 6 atmospheres. The process takes from six to eight days. The resulting hydrocarbon, corresponding to the formula $C_{12}O_{18}$, is collected, and the part of it which evaporates between 190° and 230° is rectified. The product of this reaction yields with water a red-brown oil, which is washed with water, rendered slightly alkaline, and is then ready for use.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., May 9.

BUSINESS appears to have been a good deal livelier this week, and a considerable number of articles have advanced in price. The drug auctions occupied the trade until well in the afternoon on Friday last, but no very considerable alterations took place on that occasion. In drugs Cape aloes sold at a decided improvement. Ambergris is very dear for fine quality, and rhubarb brought very high rates. Orris root is reported again dearer from Italy, and saffron from Spain. English peppermint oil is higher, as are also clove oil and French lavender. Neroli will also probably be dearer. Castor oil and camphor (raw and refined) have also advanced, while ergot of rye and insect powder are steady. Cascara sagrada, Chinese cantharides, musk, gum mastic, and China root are lower. Oil of cubebs has also eased off, and cod-liver and citronella oils are weak. Tamarinds are selling lower, and cinchona was also a trifle lower at the auctions. In chemicals the principal event is the advance in quicksilver. Tartaric acid and cream of tartar are also somewhat firmer again. On the other hand, quinine is slightly easier, and morphia is by no means strongly held. Borax is firmly held, so are some of the soda salts—caustic, bicarbonate, and crystals—partly on account of the Tyne strike. Nitrate of soda lower, and sulphate of ammonia higher in price. Cocoa-butter, cloves, gum olibanum, turpentine, linseed oil, and gambier are dearer, and ginger and China galls have considerably advanced. On the contrary, shellac, Japan wax, mace, and white pepper are easier.

A CIRCULAR letter has been issued from the firm of Barron, Squire & Co., of Bush Lane, in which the family of the late Mr. Fred. Barron notify the transfer of the business—of which, since the death of Mr. Squire in 1873, the late Mr. Barron had been the only proprietor—to Messrs. Barron, Harveys & Co., of Giltspur Street, E.C. The latter firm have taken over the entire stock, plant, and fixtures, and recipes for Messrs. Bass's preparations. After June 1 the premises in Bush Lane will be open only for the purpose of removing the stock; all empties, which are to be debited to the account of Barron, Squire & Co., must after that date be returned to Giltspur Street. Messrs. Barron, Harveys & Co. have engaged some of the travellers and staff, and will, therefore, be conversant with the requirements of the old connection.

IN our last issue we reported the sale of some annatto seeds, at Thursday's drug sales, at 2*d.* per lb. The accuracy of this report is denied by a firm of Mincing Lane brokers, who claim that the seeds were bought in at 4*d.* per lb., though they might have been had at 2*d.* per lb. These brokers say that they had an order for annatto seeds from a large provincial customer, and executed it at 2¾*d.* per lb., to which price their client, upon reading THE CHEMIST AND DRUGGIST'S report, demurred. Now we have referred to our own catalogues of the auctions, and also to the printed lists of three different firms occupying different positions in the room. They all say that the seeds were sold at 2*d.* per lb. But the broker who offered the seeds denies having sold them. The inference, therefore, is that if seeds were not actually sold the lots were treated in such a way by the presiding broker as to lead different observers, all presumably alive to what was going on, into the belief that a sale was made. When we pointed this out, we were told that brokers often do their best to mislead the room and to keep their prices secret. Possibly this is so, but the question is whether that game is worth the candle, or whether such an action is calculated to injure those who have recourse to it most of all.

THE BOARD OF TRADE RETURNS for April are again of a highly satisfactory character. As compared with the corresponding month of last year, which contained an equal number of working days, the imports of foreign goods have risen from 32,098,693*l.* to 37,225,549*l.*, an advance of nearly 13 per cent., principally contributed by foodstuffs, raw materials for textiles, and manufactured goods. Metals show a decrease in value, owing to the collapse in the market of many of the principal articles of this branch. Of chemicals, dyes, and tanning goods, our imports have also decreased, from 908,174*l.* to 879,505*l.*, while there has also been a slight falling off in oils. Our exports of British and Irish goods have risen during the month of April from 17,775,474*l.* in 1888 to 19,569,647*l.* in April, 1889, or, say, by just over 10 per cent. This increase is spread over all branches, with the exception of articles of food. Raw materials have improved about 30 per cent.; machinery, 22 per cent.; sundry goods, 16 per cent.; metals and metal goods, 11 per cent.; apparel, 8 per cent.; and yarns and textiles, 5 per cent. Taking the exports of some goods of pharmaceutical interest in April of the last three years, we find:—

—	1887	1888	1889	1887	1888	1889
	Cwts.	Cwts.	Cwts.	£	£	£
Alkali	526 983	588,938	536,326	150,316	150,215	135.076
Bleaching materials	122,425	132,917	111,592	46,234	50,178	41.756
Drugs and medicines	—	—	—	62.784	76.953	77.572
Soap	35,502	38,144	48,084	35,314	38,709	48,831

Re-exports of foreign goods have increased in value from 5,100,207*l.* in April, 1888, to 5,573,827*l.* in April, 1889.

ACID (CITRIC).—On the spot the article remains steady at 1*s.* 4½*d.* per lb., while for forward delivery 1*s.* 5*d.* per lb. is still required.

ACID (TARTARIC) is rather better, say, at 1*s.* 2⅞*d.* to 1*s.* 3*d.* for *foreign*, and 1*s.* 3¼*d.* to 1*s.* 3½*d.* for *English*. The more seasonable weather and the advance in cream of tartar are likely to make their influence felt on this article also. We hear it said, in fact, that this week a parcel of foreign acid for immediate shipment has been done at 1*s.* 3½*d.* per lb., "c.i.f." terms.

ALOES.—On Friday last a parcel of 50 cases *Cape* aloes was reached, and sold, with fair competition, at an advance of 1*s.* 6*d.* to 2*s.* per cwt.; good bright hard at 20*s.* 6*d.* to 21*s.*; partly drossy to ordinary gritty at 19*s.* down to 16*s.* per cwt.

AMBERGRIS.—The lot of fine grey ambergris which was offered at the last drug auctions was there bought in at 115*s.* per oz., and we understand that it has since changed hands at 110*s.* per oz.

ARSENIC continues in good demand at 13*s.* to 13*s.* 3*d.* per cwt. for best white powder.

BLEACHING POWDER, after having been dull and rather easier, closes better again, say, 8*l.* to 8*l.* 5*s.* in London, and at from 7*l.* 2*s.* 6*d.* to 7*l.* 3*s.* 9*d.* on the Tyne.

BORAX.—The demand is rather slight, and second-hand parcels are still obtainable at 28*s.* 6*d.* per cwt. It is said that there are fresh attempts to effect a "combination" among the producers, having its headquarters in Glasgow, but from what we hear it is doubtful whether the scheme will succeed, as some of the makers stand out, and there might be a good deal of difficulty because of the supposed large stock in second hands.

CALABAR BEANS.—From Liverpool further sales are reported at 10¼*d.* per lb.

CAMPHOR (CRUDE).—Holders of crude camphor are exceedingly firm, and we hear that 105*s.* per cwt. is now asked for *Japan* camphor on the spot, and that 102*s.* 6*d.* has actually been paid. The London statistics relating to the

article (though their reliability is questioned in some quarters) are certainly very favourable, the figures being:—

	1889 Tubs	1888 Tubs	1887 Tubs	1886 Tubs	1885 Tubs	1884 Tubs
Imports, Jan. 1–April 30	96	4,784	2,586	1 994	3,260	622
Deliveries „ „	758	2,173	4,190	2,133	2,163	1,839
Stock, 30th April	270	3,889	4,572	6,985	9,486	8,645

Since April 30, however, 817 tubs have come to hand.

CAMPHOR (REFINED).—Slightly more money is being asked by the refiners, both foreign and English, the latter being quoted at 1*s.* 3*d.* to 1*s.* 3½*d.* per lb. for bells, according to quantity, and the former at 1*s.* 2½*d.* per lb. A good trade is reported in the article.

CANTHARIDES.—Business has been recently done, it is said, in *Chinese* cantharides at 1*s.* per lb., showing lower value, but on Friday, at the drug auctions, 10*d.* was suggested for one or two parcels. Fair small and broken mixed Russian, 4*s.* 3*d.* per lb.

CARDAMOMS.—The exports of cardamoms from Ceylon in the periods between October 1 and April 11 have been as follows:—

1888–9	1887–8	1886–7	1885–6
188,393 lbs.	214,815 lbs.	210,173 lbs.	149,409 lbs.

CASCARA SAGRADA lower. Good bright genuine bark sold at 2*s.* 11*d.* per lb. in auction, and for "winter" bark 1*s.* 9*d.* per lb. is suggested.

CHINA ROOT.—Fourteen bales were sold without reserve at 1*s.* to 1*s.* 3*d.* per cwt. at the auctions last Friday.

CHIRETTA.—Ten bales fairly good herb sold at 2¼*d.* to 2½*d.* per lb.

CINCHONA.—The public auctions on Tuesday were, as might have been expected, extremely heavy. They comprised, of—

	Packages		Packages	
Ceylon bark	2,098	of which	1,691	were sold
East Indian bark ..	1,623	„	1,257	„
Java bark	170	„	170	„
South American bark	55	„	30	„
Total	3,946	„	3,148	„

East Indian barks, from the Wynaad and Mysore districts, were again largely represented, and the quality of these barks was generally good, several parcels bringing prices which pointed to a sulphate of quinine equivalent of 4 to 6 per cent., and for such parcels there was a good competition at full rates. The Ceylon barks, however, included a very large proportion of poor stuff. At the commencement of the auctions there appeared to be a very fair demand, but gradually this fell off, and towards the close of the sales only very low figures could be obtained, and some brokers bought in a rather large proportion of their goods. The unit is generally placed slightly lower than at the preceding auctions, though fully as high as the average of the Amsterdam sales on May 2. The following are the approximate quantities purchased by the principal buyers:—

	Lbs.
Agents for the Auerbach works	200,267
„ the American, French, &c., works	148,081
„ the Brunswick works	136,581
„ the Frankfort o/M. and Stuttgart works ..	110,057
„ the Mannheim and Amsterdam works ..	87,560
Messrs. Howards & Sons	20,955
Mr. Thomas Whiffen	4,300
Sundry druggists..	62,857
Total sold	770,648
Bought in or withdrawn	188,944
Total quantity catalogued	959,592

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it, firms who buy a small quantity of bark by weight frequently taking the richest lots, and *vice versâ*. An analysis of the catalogues gives the following prices for sound bark:—

CEYLON BARK.—*Original.*—Yellow varieties: Spoke shavings, fair to good, 2*d.* to 3½*d.*; richer ditto, mixed with chips, up to 5*d.*; chips, ordinary to good fair, 1½*d.* to 4½*d.*; good to rich chips mixed with quill, 4*d.* to 8*d.*; root, 5½*d.* to 6½*d.* Red varieties: Thin dull to good chips, 1½*d.* to 3*d.*; mixed with twigs, 1¾*d.* to 3½*d.*; shavings, 3*d.* to 4½*d.*; ordinary dusty to good root, 2½*d.* to 4*d.* Grey and hybrid varieties: Fair to good chips and shavings, 3*d.* to 4*d.* per lb. *Renewed.*—Yellow varieties: Ordinary to good stem chips, 3*d.* to 5½*d.*; chips and shavings up to 6*d.* Red varieties: For chips and shavings an offer of ¾*d.* per lb. was refused; ordinary to fair chips, 2*d.* to 3½*d.*; chips and shavings, 4*d.* to 5½*d.* Grey: chips, 2½*d.* per lb.

EAST INDIAN BARK.—*Original.*—Yellow varieties: Small to fair chips, up to 3½*d.*; fair to fine chips mixed with shavings, 4*d.* to 7*d.*; fine shavings, 9*d.*; fair but broken to good druggists' quill, 5½*d.* to 8½*d.* Red varieties: Fair chips, 3½*d.* to 4*d.*; twigs, 1½*d.*; root, 3*d.* to 3½*d.*; fair to good bright spoke shavings, 2½*d.* to 4*d.*; druggists' quill, ordinary broken and papery, 3*d.*; fine old, 9*d.*; and very fine heavy old, up to 1*s.* 4*d.* per lb. *Renewed.*—Yellow chips: 6½*d.* to 7*d.*; grey chips, 6*d.* to 7*d.*; red chips, 5*d.* to 7½*d.*; hybrid, 5½*d.* per lb.

JAVA BARK.—Grey: Fine chips, 6*d.* to 6½*d.*; fair chips, 3*d.* to 3½*d.*; common twigs, 1*d.* to 1½*d.*; root, 4*d.* to 6*d.* per lb.

SOUTH AMERICAN BARK.—Of 45 packages cultivated Bolivian *Calisaya*, 28 were sold at 7*d.* to 8*d.* for good short partly silvery quill. Eight cases bold, but very dark and damaged, *Carthagena* are held at 9*d* per lb. For two bales so-called *Red* bark, imported *viâ* Hamburg, very ordinary colourless quality, 9*d.* was paid for sound, and 2½*d.* for damaged. The shipments of bark from Colombo in the periods between October 1 and April 11 have been:—

1888–9	1887–8	1886–7	1885–6
Lbs.	Lbs.	Lbs.	Lbs.
6,490,357	5,803,395	8,031,374	7,929,889

The following figures are taken from the official commercial returns for April:—

	1887 Cwts.	1888 Cwts.	1889 Cwts.
Imports, April	13,375	10,724	15,869
„ Jan. 1—April 30 ..	57,612	47,331	61,077
Exports, April	14,950	10,025	9,569
„ Jan. 1—April 30 ..	54,747	40,031	43,845

At the Amsterdam auctions on May 3 the bark offered contained an equivalent of about 240,000 oz. of quinine sulphate. The results of the chemical analyses were widely different, especially for manufacturing barks, and the prices paid fluctuated a good deal. Druggists' barks in long stout quills met a good demand, and a few cases of fine quality realised comparatively high prices. The richest lots were 6 packages Ledger original stem chips; 8·37 per cent. Q.S. sold at 62 cents, 8 packages ditto renewed stem chips; 8·17 per cent. Q.S. sold at 64 cents, and 13 packages ledger broken quill; 8·92 per cent. Q.S. sold at 59 to 60 cents. The principal buyers, in order of their purchases, were:—

—	Kilos. Bark	Kilos. S. Quinine
The Mannheim and Amsterdam Factories ..	41,820	1,371
The Auerbach Factory	38,425	1,240
Agents for the American, French, &c., Works	47,983	1,180
The Brunswick Factory	14,100	662
The Frankfort o/M. and Stuttgart Factories ..	10,300	640
M. Paillendier, Paris	4,488	315
Various other Manufacturers	10,081	198
Druggists	8,278	—

COCA LEAVES.—On Friday 4 cases (24 lbs. each) of very fine bright green leaves, grown on the Kelvin estate in Ceylon, were disposed of at auction at 1*s.* 10*d.* per lb., an exceptional price. There have been sundry small shipments from Ceylon during the last few years, but this we think is the heaviest one ever received, though the article has now been cultivated in the island for a good many years. Some five or six years ago, during the rush for coca leaves, owing to the discovery of the anæsthetic properties of cocaine, a parcel of Ceylon leaves realised the highest price ever known for the drug. Twenty-five boxes (16 lbs. each) *Java* leaves were all sold on Friday, good green, but broken, leaf, at 6*d.* per lb.; brown, at 3*d.* per lb.

COCOA BUTTER.—The usual monthly auction of *Cadbury's*

cocoa butter was held on Tuesday, when 350 2-cwt. cases were disposed of with good competition at 11⅜*d.* per lb., advancing to 1*s.* 0⅛*d.* per lb. The medium price was 11¾*d.* per lb., or about 1¼*d.* per lb. in advance of the previous auction rates.

COPPER (SULPHATE).—On the spot the article is a little stronger, at 24*l.* to 24*l.* 10*s.* for prompt delivery, but for June it may still be had at 23*l.*

CREAM OF TARTAR has further slightly advanced, first French crystals being now held at 97*s.* per cwt., although some lots of German powder, thought to be not of equally good quality, are offering at 95*s.* 6*d.* to 96*s.* per cwt. on the spot. For forward delivery prices are still higher than on the spot.

CUBEBS.—Of 12 bags stalky berries, mixed colours and sizes, a few damaged ones sold at 22*l.* to 22*l.* 10*s.* per cwt. We hear from Amsterdam that 195 piculs of new crop cubeb berries are on the way for that port from Java. The latest reports from the island confirm the rumour that the crop has been a small one, and owners are firm at the high quotations of the previous season.

CUTCH.—Prices remain firm but unaltered, with small sales of "double eagle" and Flag BB at 29*s.*, *Star B* at 28*s.* 6*d.*, and *M.P.* at 25*s.* per cwt.

DRAGONSBLOOD.—At Friday's auctions, good fiery seedy block was held at 6*l.* 10*s.* per cwt., while 4 cases good saucers, not so bright in colour, sold at 6*l.* to 6*l.* 7*s.* 6*d.* per cwt.

ERGOT OF RYE.—On Friday further sales were made at the decline reported the day previous, viz., good sound slightly dusty *Spanish* at 1*s.* 0½*d.* to 1*s.* 1*d.* per lb. Since then a better inquiry is said to have sprung up for the article with sales of *Russian* at 10*d.* to 10½*d.* per lb.

GALLS.—The supply of *China* galls is not very large at present, but a very much better inquiry has set in, and 63*s.*, which was accepted a few days ago for a small lot on the spot, has since been refused. A large number of transactions are reported. For arrival, 55*s.* to 56*s.* "c.i.f." for April–May steamer shipment from Shanghai to London; 56*s.* to 57*s.* "c.i.f." for Hamburg and Antwerp; and 57*s.* "c.i.f." for Marseilles. A cablegram from Shanghai quotes 60*s.* c.i.f. Hamburg, steamer shipment, the season drawing towards a close.

GAMBIER.—Prices are still rising for block, while *cubes* are also scarce and dear, say 41*s.* 6*d.* to 42*s.* per cwt. for good quality. *Block* gambier has sold through the week at 27*s.* to 27*s.* 3*d.* per cwt. on the spot, and for arrival March-April at 26*s.* 9*d.*, April-May, 27*s.*, and June-July 26*s.* 6*d.* per cwt. Large purchases have lately been made here for America, both for spot stuff and forward delivery.

GINGER.—A demand has lately sprung up for this article, especially for *Cochin* ginger, resulting in an advance for ordinary and medium grades. This demand continued to make progress at the weekly auctions, when 2,877 packages of this description were all disposed of at an irregular advance of from 3*s.* to 5*s.* per cwt. as compared with the previous week's sales. Ordinary brown to fair rough sold at 19*s.* to 20*s.* 6*d.*; fair boldish at 20*s.* 6*d.* to 22*s.*; picked bold up to 41*s.*; bright washed, 23*s.*; dull to good medium, 29*s.* to 34*s.*; medium to fine bold, 30*s.* to 34*s.* 6*d.*; small to bold cut, 27*s.* 6*d.* to 59*s.* per cwt. *Jamaica* ginger is also dearer: common to fair Rhatoon, 50*s.* to 59*s.* 6*d.*; small washed to good bright, 62*s.* to 83*s.*; fine bold to selected, 90*s.* to 125*s.* per cwt. To-day over 3,000 packages *Cochin* are reported sold privately at a fresh advance.

GUM ARABIC.—In Liverpool fine *Gehzirah* gum has been sold at up to 7*l.* per cwt., and *Brazilian* at up to 70*s.* per cwt. for selected. There has been a somewhat better demand for East Indian gums, and privately good *Aden* sorts have changed hands at 77*s.* 6*d.* to 80*s.* per cwt.; fair to good *Kurrachee* gum has also been done at 90*s.* to 5*l.* 10*s.* per cwt.; *Cawnpore* drop at 55*s.*, and rather dark *Ghatti* drop at 35*s.* 6*d.* per cwt. At to-day's auctions there was a very large supply, comprising 3,641 packages, mostly *East Indian.* The demand was very slack, and good to fine Amrads and Ghattis sold at an irregular decline of from 5*s.* to 10*s.* per cwt. The following prices were realised:—Common brown drop *Amrad*, 39*s.* to 45*s.* 6*d.*; fair reddish to good bright ambery, 50*s.* to 76*s.*; siftings, 16*s.* to 35*s.*; fine tears, 80*s.*; pickings from 9*s.* to 38*s.*; dark to fair *Oomra*, 40*s.* to 59*s.*; dark *Madras*, 24*s.* to 39*s*; good clean *Bombay-Aden*, 48*s.*; fine pale, 75*s.*; common Ghatti, 18*s.* 6*d.* to 24*s.*; fair to fine, 27*s.* 6*d.* to 67*s.* 6*d.*; superior, 81*s.* to 92*s.*; siftings, 2*s.* 6*d.* to 38*s.* *Mogadore Amrad*, fair to good, 52*s.* to 59*s.*; brown Barbary, 80*s.* *Cape*, fine small pale, 85*s.*; fine bold pale ambery ditto, 6*l.* to 6*l.* 5*s.*; glassy brown, 30*s.* to 50*s.* *Australian*, fair red good pale, 39*s.* to 50*s.*

GUM ELEMI.—For 15 cases fine clean white 40*s.* per cwt. is asked.

GUM MASTIC.—Three cases fair yellow drop sold cheaply on Friday last at 1*s.* to 1*s.* 1½*d.* per lb.

GUM OLIBANUM.—At to-day's auctions 464 cases were mostly sold, with very good competition, at an advance of 1*s.* to 2*s.* per cwt. on fair to good qualities, while some very fine lots brought fancy prices. Five cases very fine bold drop sold at 67*s.* 6*d.*; good pale, 59*s.* to 60*s.*; medium to fair pale mixed drop, 40*s.* to 45*s.*; common to fine pickings, 12*s.* 6*d.* to 24*s.* 6*d.*; ordinary to fair siftings, 12*s.* 6*d.* to 15*s.* per cwt.

HONEY.—Eight packages fair brown liquid *Jamaica* honey sold on Friday at 35*s.* to 38*s.* per cwt. At Liverpool business has been done in ordinary Chilian (pile 3) at 29*s.* to 29*s.* 6*d.* per cwt. ex quay.

INDIGO.—The market for East Indian indigo remains exceedingly quiet. In Bengal and Benares, according to the latest Calcutta mail advices, rain is still much wanted. In Behar the caterpillar plague is abating, although there also rain would do good.

INSECT POWDER.—The market is very firm, and the Trieste stock of flowers is now not over 45 tons. Fine pure powder, 1*s.* 6*d.* per lb.

IODINE unaltered. *Crude*, 12*s.* 9*d.* per lb.; *Resublimed*, 13*s.* to 13*s.* 3*d.*; *Potassium iodide*, 11*s.* 6*d.* to 11*s.* 9*d.* per lb., according to quantity.

MERCURIALS.—To-day the makers still held to their former quotations: *Calomel*, 3*s.* 3*d.*; *Corrosive sublimate*, 2*s.* 7*d.*; *Ointment*, 1*s.* 11*d.*; *Red precipitate*, 3*s.* 6*d.*; *White* ditto, 3*s.* 5*d.*; *Blue pill*, 1*s.* 11*d.*; *Vermilion* (English), 2*s.* 8*d.* per lb. But in all probability these prices will be 1*d.* less all round to-morrow.

OIL (CASTOR).—Fine *Italian* oil again dearer, and now quoted at 4⅞*d.* per lb. In Marseilles the market is reported excited, and some of the makers have had to stop working owing to want of seed. The quotations there are said to be fully as high as those on our market. In Liverpool the inquiry remains good, and 2$\frac{31}{32}$*d.* per lb. has been paid for good *Calcutta* seconds, while the tendency is still upward. London quotes Calcutta firsts at 4¼*d.* and Coconada at 3$\frac{3}{16}$*d.* per lb. In Calcutta on April 16 the market was very steady indeed; prices had advanced since the previous mail in consequence of the cessation of seed imports from Madras, and also the stoppage of manufacturing operations owing to Hindoo festivals.

OIL (COD-LIVER) has now become almost a dead-letter, and although the principal importers still stick to their last quotations, no business is passing. Some agents quote lower rates, but without inducing business.

OILS (ESSENTIAL).—*Star anise* dull at 5*s.* 10*d.* per lb. on the spot, nominally. Of *Cajuput* oil, 10 cases (24 bottles each), good green colour, sold at auction at 3*s.* 3*d.* per bottle. *Cassia* dull, and 3*s.* 6*d.* per lb. is asked for good quality, but for shipment the price is lower than that. At auction 100 cases *Citronella* oil sold without reserve at ⅝*d.* per oz. Large quantities of this oil continue to be exported from Ceylon in addition to the produce of other sources. The shipments from Colombo in the periods between October 1 and April 11 have been:—1888-9, 7,858,306 oz.; 1887-8, 4,871,746 oz.; 1886-7, 4,695,168 oz. Of *Cinnamon* bark and leaf oils the exports from Ceylon have thus far been very small this season—26,187 oz., against 47,207 oz. and 43,447 oz. in the two preceding seasons. Italian oils are quiet at 4*s.* 6*d.* f.o.b. for standard brands of *Lemon.* As regards French oils, *Lavender* is still much inquired for, but in small supply and dearer. The *Violet* crop is now harvested, and

the working of orange-flowers commenced a few days ago in the South, and the flowers are said to be very dear, which will of course affect the price of *Neroli* oil. *Roses* are late this season, and it is not expected the crop will be worked until towards the end of the month. *Otto of Rose* very steady. *Clove* oil has advanced, owing to the renewed speculation in the spice, but English distilled oil of *Cubebs* is lower, at 44*s.* per lb. Essential oil of *Almonds*, 25*s.* to 29*s.* per lb., according to quality. *Peppermint.*—Holders of English oil are asking more money, as already announced in our last week's issue. American oil unchanged.

OILS (VARIOUS).—*Cottonseed* quiet; spot crude, 22*l.* 10*s.* to 22*l.* 15*s.*; refined, 24*l.* 10*s.* to 26*l.* 10*s.* *Cocoanut*, fine Ceylon, 25*l.* to 25*l.* 10*s.*; Cochin, 27*l.* to 28*l.* *Linseed* dearer, at 19*l.* to 19*l.* 10*s.* *Olive* oils quiet and dull; Mogadore, 31*l.* 5*s.* to 31*l.* 10; Sicilian, 34*l.* to 34*l.* 10*s.* *Palm* oil firm, and dearer in Liverpool. Fine Lagos, 23*l.* 10*s.* to 24*l.* *Rape* oil without alteration: refined, 26*l.*; brown, 24*l.* *Petroleum*, American, $5\frac{5}{16}$*d.* to $5\frac{9}{16}$*d.*; Russian, 5*d.* to $5\frac{1}{8}$*d.* *Turpentine* firmer. American on the spot, 33*s.* 6*d.* to 33*s.* 9*d.* per cwt.

ORRIS ROOT.—The speculative movement in Italy has made further progress, and according to the latest reports there is no stock left in the first hand now. For selected *Florentine* root 50*s.* per cwt. is asked, 40*s.* for second quality, and from 23*s.* to 27*s.* 6*d.* for *Verona* root.

QUASSIA WOOD.—At the auctions on Friday last 187 logs (47 cwts.) sold at 6*l.* 5*s.* per ton.

QUICKSILVER.—On Wednesday the importers, after having sold a large quantity (it is said 4,000 bottles), raised their price from 8*l.* to 8*l.* 5*s.*, while second-hand holders, who had previously quoted 7*l.* 19*s.*, raised their quotation to 8*l.* 2*s.* 6*d.* To-day the importers are said to require 8*l.* 10*s.*, while 8*l.* 3*s.* 6*d.* has been paid in second hand. The Board of Trade returns for April show the following results:—

		1837	1838	1889
Imports for April	lbs.	831,400	597,000	947,275
„ Jan. 1–April 30..	„	2,623,285	3,300,113	2,626,529
Exports for April.. ..	„	476,783	313,979	656,221
„ Jan. 1–April 30..	„	1,528,327	776,508	1,910,659

The London stock at the beginning of the month was estimated at 66,500 bottles, against 52,500 at the corresponding time of last year.

QUININE.—This article has been weak since our last report. On Friday last 1,000 oz. in large bulk B.&S. quinine sold at 1*s.* $0\frac{3}{4}$*d.* per oz. at auction, and since then there have been second-hand sellers at that price, and later in the week at 1*s.* $0\frac{1}{2}$*d.* To-day we hear it reported that 5,000 oz. have sold on the spot at 1*s.* $0\frac{1}{4}$*d.* per oz. The speculative German brands are quoted by the manufacturers at 1*s.* 2*d.* per oz.; Italian at 1*s.* $1\frac{1}{2}$*d.* per oz.

RHUBARB.—Several parcels were sold on Friday at auction, and brought very full prices, the competition being good. *Shensi*: Flat, slightly-wormy, three-fourths pink, one-fourth grey and spongy fracture, brought 1*s.* 8*d.* per lb.; small round, but very wormy, fair-bright coat, even pinky-grey fracture, 2*s.* 7*d.*; small druggists' root, fair coat, one-fourth dark, slightly wormy, flat, 2*s.* 3*d.* per lb. *Canton*: Fair-bright coat, even pinky-grey fracture, small round, very wormy, 2*s.* 7*d.*; bold round, fair coat, wormy, three-fourths grey, one-fourth dark fracture, 1*s.* 6*d.*; small slightly-wormy round, 1*s.* 1*d.*; bold medium to bold partly dark, very wormy round, $9\frac{1}{2}$*d.* per lb. Since last week 53 cases have arrived from China, nearly all of these being, it is said, old and dry wormy.

SAFFRON.—The very high prices now asked in Spain are checking business, though the demand is still good.

SHELLAC.—At the close of last week the market became steadier, and sales were made in the "ring" daily at somewhat firmer rates, the transactions up to Tuesday evening being for *Second orange* (TN), delivery May, 65*s.*; July, 66*s.* to 66*s.* 6*d.*; August, 67*s.* to 67*s.* 6*d.* per cwt. At the auctions only a moderate quantity was offered. Nearly all holders seemed anxious to realise, and the trade responded fairly well, the demand being a good one. Good second orange lots were steady in price, but odd and inferior parcels, of which a large proportion was included in the sales, sold at 1*s.* to 2*s.* per cwt. below the preceding auction rates. *Garnet* was also 2*s.* and *Button* 4*s.* to 5*s.* cheaper than last week. The following prices were paid:—*Orange lac*: Fair but reddish and curly firsts (H in diamond), 79*s.* to 80*s.*; good bright second orange, 65*s.*; good but reddish, 64*s.* to 66*s.*; rather darker red, 62*s.* to 63*s.*; ordinary weak to fair livery, 60*s.* to 62*s.*; cakey, 59*s.* per cwt. *Garnet*: good free AC, 50*s.* to 51*s.*; unworked, 49*s.* to 50*s.*; blocky ditto, 49*s.*; AT fair free, 48*s.* 6*d.* to 49*s.* 6*d.*; fine ruby OCC, 51*s.* *Button*: mixed weak thirds, 59*s.* to 61*s.* per cwt. On Wednesday prices declined in the "ring." According to Calcutta reports dated April 16, the market was exceedingly quiet there, although the holders of best brands stood out for prices much above buyers ideas. At to-day's "ring" there was a very dull tone, and no business is reported, though privately 65*s.* 6*d.* is said to have been accepted for August delivery. The figures were:—

	May	June	July	Aug.	Sept.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*
Second orange TN, sellers	67 0	66 0	68 0	—	67 6
„ buyers	62 0	62 6	64 0	65 6	—
Garnet AC, sellers ..	52 0	—	53 0	—	—
„ buyers ..	49 0	—	50 0	—	—

SPICES.—In *Arrowroot* there have been private sales of small lots of St. Vincent (O.W.I.A.) at 4*d.* per lb. At the auctions a steady tone prevailed. *Clove stems* sold at $1\frac{7}{8}$*d.* Fairly bright stalky Zanzibar *Chillies* sold at 31*s.* per cwt. *Cloves* have again been in active speculative request this week, and sales of some importance have been made at $7\frac{3}{4}$*d.* to $7\frac{7}{8}$*d.* per lb for fair Zanzibars. At the auctions this price was maintained, and since then 8*d.* per lb. has been paid for fair quality. *Mace* lower. Ordinary to fair red and broken Penang, 2*s.* 10*d.* to 3*s.*; fine West Indian, 3*s.* 2*d.*; pickings, 2*s.* 5*d.* to 2*s.* 7*d.* per lb. *Nutmegs* are selling steadily at the last quotations. *Pimento* in slow demand at unaltered rates; grey to good clean, $2\frac{7}{8}$*d.* to $3\frac{1}{8}$*d.* per lb. *Black pepper*: Singapore has sold privately at $6\frac{3}{4}$*d.* on the spot, and for arrival, April steamer, at $6\frac{13}{16}$*d.* per lb., usual terms. At auction dusty Atchin brought $4\frac{3}{8}$*d.* to $4\frac{3}{4}$*d.*, and good ditto $5\frac{1}{4}$*d.* to $5\frac{3}{8}$*d.*; fair to good Singapore, $6\frac{11}{16}$*d.* to $6\frac{3}{4}$*d.*; Lampong, $6\frac{1}{8}$*d.* to $6\frac{1}{4}$*d.*; Aleppy at 7*d.* per lb. *White pepper*: At auction Penang was much lower, going at $9\frac{3}{4}$*d.* to $9\frac{7}{8}$*d.* per lb.

TAMARINDS.—In Wednesday auctions, of 581 packages new West India, about 250 were sold, at a decline of 1*s.* *Barbadoes* sold, ordinary to fair, 13*s.* to 14*s.* 6*d.*; good at 15*s.* *Antigua*, ordinary small, at 9*s.* Ordinary *St. Vincent* at 9*s.* 6*d.* *Dominica*, ordinary, at 9*s.* 6*d.* per cwt. By different vessels from New York and the West Indies we have received 553 packages this week.

VANILLA.—Several parcels have arrived from Ceylon lately. In the Mauritius market, on April 10, vanilla was scarce, and fine long beans were not to be had.

WAX (JAPAN).—The market is quiet, and prices have eased off again, 44*s.* to 45*s.* per cwt. being now the nearest value for fair pale tablets.

THE AMERICAN MARKETS.

NEW YORK, April 27.

THE drug market here has been exceptionally quiet for the past ten days, and, as next week the first three days will be devoted to the Washington Centennial, no movement is expected in trade till the second week of May.

The prices in parentheses in sterling are the equivalent London quotations, all allowances being taken into account.

ALOES.—The stock of *Curaçao* of about 200 cases in first hands is still unsold, no buyers can be found at 3c. (22*s.* 6*d.*)

BALSAMS.—*Copaiba* is very firm in dealers' hands; no further arrivals are reported. For *Tolu* there is no demand; 28c. (1*s.* $3\frac{1}{2}$*d.*) will buy prime quality from the importers in 10-lb. tins.

CASCARA SAGRADA.—The market has been upset by free offers from the Pacific coast of fair-quality bark for prompt shipment, said to be steam dried, the price asked being 25c. (1*s.* 2*d.*) For later delivery there are also sellers at low figures, as it is expected the quantity collected will be large. True old bark sells in a small way at 80c. (3*s.* 6*d.*)

OILS (ESSENTIAL).—*Peppermint.*—Some large lots of Michigan oil, in bulk, were quietly bought up on speculation, and the market has now a firmer tone. H. G. H. brand has been in considerable demand for export at from $2 95 to $3 (13*s.* 2*d.* to 13*s.* 4*d.*). Stock of this kind is small. *Sassafras.*—The market is tending lower; pure is 40c. (1*s.* 10*d.*); the demand is slow. *Spermaceti.*—The export demand keeps up, and prices are very firm to-day, 23½c. (1*s.* 1½*d.*).

QUININE.—The demand is not large, and prices are, if anything, a little weaker. The imports from January 1 are nearly double those during the same period last year. *B. & S.* is quoted 27c. (1*s.* 2¾*d.*); but *Milan* sells at 25c. (1*s.* 1¼*d.*) per oz.

CHEMICALS IN THE NORTH OF ENGLAND.

BORAX.—There are various rumours respecting new works said to be starting in San Francisco, but so far we cannot trace any foundation for the report.

SODA SALTS.—*Soda ash* has been very steady for some time past; stocks are small at the works, and orders are coming in freely at 1*d.* to 1$\frac{1}{16}$*d.* per degree. *Caustic* has fluctuated in consequence of second-hand sellers pressing on the market; the tone, however, at the close is somewhat better, stocks at the works being much reduced, and export inquiries and orders being of a larger and more important character. The closing quotations are, 60 per cent. cream at 5*l.* 12*s.* 6*d.*; 60 per cent. white at 5*l.* 15*s.*; 70 per cent. white at 6*l.* 12*s.* 6*d.* *Bicarbonate* has been more active, chiefly for export to India, and sales have been made for quantity at 4*l.* 12*s.* 6*d.* to 4*l.* 15*s.* per ton. *Crystals* are somewhat more steady, caused by the advance in Newcastle, and makers are firmer at 2*l.* 8*s.* 9*d.* to 2*l.* 10*s.* per ton. *Nitrate*, in consequence of heavy arrivals, has had a severe drop, but orders are coming in more freely for manure purposes, and the decline so far has been stopped. The closing values are 8*s.* 9*d.* to 9*s.* per cwt., as in quality.

PARLIAMENTARY NEWS.

THE ADMINISTRATION OF MORPHIA AT WORKHOUSES.

In the House of Commons on Thursday Mr. Pickersgill asked the President of the Local Government Board whether his attention had been drawn to the fact that last year upwards of 42 lbs. of chloroform-morphia was administered to the inmates of the Exeter Workhouse, and that it had been the practice to leave a certain quantity of this compound (undiluted) in other charge than that of the medical officer:

Whether he proposed to take any action in this particular instance:

And, in any case, whether he would direct the inspectors of his Department to inquire, as occasion may serve, into the conditions under which dangerous drugs are administered in Poor Law institutions.

Mr. Ritchie, in reply, said:—"I have communicated with the guardians of the Exeter Union with regard to this matter, and am informed by them that it is a fact that 42 lbs. of chloroform-morphia were used at the workhouse during the past year. It appears that the medical officer, who has usually from 130 to 140 cases on his books, keeps this medicine, in its original form, in a locked cupboard; but he leaves out a small quantity in a phial-bottle for use by the nurses in cases of emergency. He does not consider that the practice is attended with danger; but the Board are advised that it is desirable that the tincture only should be given, and under such medical supervision as is possible, and they have informed the guardians accordingly. It is the practice of the Board's inspectors to call attention to any neglect of proper precautions in the use of dangerous drugs in workhouses which may come under their notice."

LONDON DRUG STATISTICS.

THE following figures refer to the stocks of the principal drugs in the port of London on April 30, 1889, and to the imports and deliveries from February 1 to April 30, as compared with the preceding year:—

Article	Stocks		Imported		Delivered	
	1889	1888	1889	1888	1889	1888
Aloes ..cs & pkgs	7,337	4,384	1,574	826	1,226	1,660
„ .....gourds	1,773	4,051	172	98	447	726
Anise, Star .. chts	94	251	40	100	85	30
Arrowroot ....cks	12,348	13,603	6,006	5,675	4,524	5,035
„ bxs & tins	6,795	7,593	715	1,757	1,780	2,297
Balsams ..cks, &c.	373	352	73	47	120	201
Bark (Cinchona),						
S. Americancases	433		7		30	
bls, &c.	34,524		2,540		2,313	
E.I., Ceylon, and		59,779		22,728		22,274
Java .....cs	1,433		731		635	
bls, &c.	21,303		23,749		17,557	
Borax.....pkgs	587	486	6	—	37	1
Calumba .... „	1,610	2,717	99	517	333	598
Camphor .... „	270	3,889	96	4,784	758	2,873
Cardamoms ..chts	1,241	1,010	,315	1,250	649	933
Cocc. Ind. bgs, &c.	305	265	—	—	44	21
Cochineal ....srns	4,718	5,799	1,381	1,685	1,578	1,165
Cream of Tartar cks	11	13	8	—	10	—
Cubebs.....bgs	15	20	32	24	141	117
Dragon's Blood chts	180	108	136	70	36	61
Galls, China, &c. cs	1,891	6,636	756	7,697	990	2,711
Turkey .....sks	4,079	5,214	3,819	4,730	2,457	2,573
Gums—						
Ammoniac pkgs	120	198	6	5	11	43
Animi & Copal pkgs	5,340	5,385	2,633	4,314	2,186	3,343
Acacia..... „	25,142	12,810	14,436	8,261	8,839	6,721
Asafœtida.. „	401	514	290	257	238	193
Benjamin .. „	2,173	1,711	1,055	1,199	769	1,019
Damar .... „	3,228	3,062	2,555	1,473	1,858	1,828
Galbanum.. „	—	—	—	—	—	—
Gamboge .. „	85	119	49	88	57	78
Guaiacum .. „	19	37	35	3	32	45
Kino ..... „	100	122	16	66	3	20
Kowrie ....tons	1,237	701	971	967	1,109	766
Mastic ....pkgs	43	133	24	36	12	8
Myrrh..... „	532	507	157	175	170	216
Olibanum .. „	3,539	5,961	3,677	4,337	2,836	2,350
Sandarac .. „	876	1,484	443	881	324	446
Tragacanth „	7,003	6,071	3,943	6,251	2,676	2,084
Indiarubber, E.I. tons	283	306	135	195	183	143
Madagascar.. „	63	48	77	55	40	31
S. American .. „	78	136	101	119	77	103
African, &c... „	549	642	173	389	199	343
Total	973	1,132	486	758	499	620
Indigo, E. Indian srns	15,239	15,844	13,045	13,582	6,843	6,035
„ W. Indian „	3,263	4,613	3,556	5,896	2,312	3,118
Ipecac. casks & bags	467	70	636	125	197	218
Jalap .....bls	73	138	—	25	14	33
Lac Dye .....chts	5,847	6,903	—	—	33	263
Myrabolans ..tons	7,501	8,761	2,460	3,020	2,616	4,801
Nux Vomica pkgs	448	542	85	476	745	480
Oils—						
Anise .....cs	131	71	174	80	53	61
Cassia ..... „	52	135	104	78	69	106
Castor .....cks	627	736	210	205	158	351
„ .....cs	3,521	10,225	809	6,193	4,296	3,483
Cocoa-nut....tns	2,251	2,544	2,149	2,019	1,384	1,291
Olive ..cks, &c.	932	1,117	1,747	1,163	1,183	725
Palm .....tns	30	235	41	85	74	58
Opium ..chts, &c.	1,538	1,761	288	224	367	568
Rhubarb.....chts	865	925	299	360	457	569
Safflower .....bls	559	180	—	—	31	179
Saltpetre ....tons	592	1,540	1,654	1,700	1,647	1,137
Soda Nitrate.. „	2,653	770	7,394	4,612	6,749	5,391
Sarsaparilla ....bls	388	556	551	511	549	376
Senna .... bls, &c.	1,590	1,745	657	825	956	1,536
Shellac, Orange chts, &c.	48,745	53,263	10,315	20,785	8,056	9,514
Garnet.. „	16,210	20,081	3,049	7,050	2,048	2,150
Button.. „	7,455	10,985	2,605	2,599	2,957	2,732
Total ..chests	72,410	84,329	15,969	30,434	13,061	14,396
Sticklac ..chts, &c.	4,055	4,388	658	575	430	578
Gambier .....tns	1,081	1,585	3,181	3,837	3,257	4,143
Catch ..... „	3,530	2,381	2,104	2,434	1,833	996
Turmeric .... „	2,901	3,434	101	1,149	424	349
Vermilion, chts, &c.	22	35	71	28	61	56
Wax, bees' ..bls & srns	464	672	173	62	235	203
„ cks & cs	1,328	1,583	1,359	805	1,170	956
„ cakes	72	42	68	24	13	—
Wax, Japan ..pkgs	1,076	1,745	200	1,279	576	446

Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

The Pharmaceutical Council Election.

On Saturday last, May 4, we sent to all the candidates for the Pharmaceutical Council a copy of the subjoined letter and questions:—

THE CHEMIST AND DRUGGIST,
Editorial Department,
42 Cannon Street, London,
May 4, 1889.

SIR,—

In accordance with the view, which is widely held, that the election of members to the Pharmaceutical Council should be based on a clear recognition of their views on the prominent pharmaceutical questions of the day, I venture to submit to you, as one of the candidates, a few inquiries, your answers to which, if you will kindly send them, will no doubt be read with much intelligent interest by a great number of voters and others concerned, when printed in THE CHEMIST AND DRUGGIST.

I am sending identical inquiries to all the candidates for the forthcoming election, and I hope you will agree that a concise conspectus of their opinions, such as we desire to obtain, would be a valuable guide to the electors, and would tend to infuse a greater interest in the affairs of the Pharmaceutical Council generally. If this should be your opinion, I rely on your esteemed assistance.

I am, Sir, yours faithfully,
THE EDITOR.

1. Do you agree with the policy of a compulsory curriculum?
2. If yes, do you consider that to be the pharmaceutical requirement of paramount importance?
3. Is there any other reason why it should be the exclusive object of the legislation now sought for?
4. Will you state your opinion of the House of Lords' clause making it penal to employ an unqualified manager in a branch shop?
5. Was it wise to omit that clause from the new Bill? If so, why?
6. Do you see any practical and probable way of promoting the interests of pharmacists by means of legislation? If so, please state the objects concisely.
7. Do you suggest any other means (other than legislation) whereby the Pharmaceutical Council can promote the interests of the trade?
8. Do you advocate repeal of the Medicine Stamp Acts?
9. Or would you propose any modification of them? If so, in what way?
10. Do you think the Pharmacy Acts should be more vigorously administered? If so, how?
11. Would you oppose the employment of the Pharmaceutical Research Laboratory for any investigation which should involve experiments on animals?
12. Will you intimate any policy you advocate beyond the subjects suggested by the foregoing inquiries?

The first response was received on Monday morning from

MR. CROSS, OF SHREWSBURY,

who wrote as follows:—

SIR,—I do not see that any useful result would follow my answering categorically your formulated questions, and I can see a possible harm in exhibiting the individual opinions of an executive body to people who are either hostile or indifferent to its proceedings.

My constituents have always access to my opinions on the current policy of the Pharmaceutical Council, and notably to those concerning the Education Bill now before the House of Commons, by following the reports given of our proceedings in the *Pharmaceutical Journal* and your own paper; and if any one would like a further explanation in any direction I should follow my invariable custom of answering his letter as soon as possible after receipt.

Trusting that you will see in this refusal no personal discourtesy to yourself, I remain, sir, faithfully yours, W. GOWEN CROSS.

MR. ALLEN (KILBURN)

followed soon after with a letter, in which, while thanking us for the offer of publicity, he said he had many reasons for declining the invitation. "If, as you say," Mr. Allen wrote, "the view is so widely held 'that the election of members to the Pharmaceutical Council should be based on a clear recognition of their views on the prominent pharmaceutical questions of the day,' I have had the honour of a seat upon the Council for more than four years, and, taking into consideration the full reporting of the transactions of that body, both in the *Pharmaceutical Journal* and THE CHEMIST AND DRUGGIST, rather than assume that members of the Pharmaceutical Society generally were not intelligent and discriminative readers of these publications I would much prefer to believe that, so far, at least, as regards old members of Council, the individuals who really desire to clearly recognise the views of candidates are already in possession of abundant information, and that these, in the exercise of their common sense, would resent any assistance either from yourself or from me which was intended to influence their decision as to whom they should accept or whom reject. I am, very faithfully yours, CHAS. B. ALLEN."

On Tuesday we had a reply from

MR. MARSHALL LEIGH, OF BRIGHTON,

saying: "I cordially agree with you that all candidates should state their views on current questions, and beg to enclose you a copy of my 'address,' in which you will find my opinions concisely stated."

The chief part of Mr. Leigh's address has been published in this journal as an advertisement; it answers certain of our questions as follows:—Mr. Leigh is "not in favour of the Pharmacy Acts Amendment Bill (commonly called the Curriculum Bill) in its present form." He is of opinion that if the legislature requires a professional education from those entering the business, the same protection which the professions enjoy should be accorded. The evils of cramming can be easily met by making the examinations more practical and thorough. Whilst making provision for education, he says, the Pharmaceutical Society should not forget the duty of protecting and advancing trade interests. He thinks the Pharmaceutical Society should negotiate a settlement of disputed points concerning the Medicine Stamp Acts, and even defend chemists where the law has not been wilfully violated. He also advocates that the Pharmaceutical Society should take energetic steps to oppose the proposals of the railway companies so far as they relate to drugs and chemicals; that the Council should also take more effective measures for preventing unqualified men carrying on business to the detriment of those who have qualified; and that, should an opportunity occur, the Council should endeavour to obtain the exemption of all chemists from jury service.

Mr. Broad's Opinions.

Mr. John Morris Broad, 510 Hornsey Road, who thinks it "a good idea to send questions for the candidates to answer," responds to ours as follows :—

1. Yes.
2. No.
3. No.
4. The clause is unjust.
5. Yes. Because it would have carried in itself the seeds of its own destruction.
6. A new Pharmacy Act.
7. By being in more sympathy with the ordinary *trade* of a chemist and druggist, and by enforcing the present Pharmacy Acts. By having a more definite understanding with the Privy Council.
8. Yes, unless more equity can be administered by the revision of the said Acts.
9. A revision, so as to have definitely settled what is required to be stamped and what is not.
10. Yes. By the Council of the Pharmaceutical Society taking immediate and summary action against defaulters.
11. I should oppose the Research Laboratory being used for vivisection.
12. All Council meetings to be open to the press. The sale of medicinal wines by chemists without a wine licence. Scheduled poisons in any form to be sold by chemists only.

Mr. Watt's Views.

Mr. James Watt (Haddington) replies as follows :—

1. Yes, provided the qualified chemist is secured in his position by an amendment of the Pharmacy Act, 1868.
2. No.
3. —
4. All branch shops should have qualified managers, a fair and sufficient time being allowed present unqualified managers to qualify.
5. No.
6. By an amendment of the 1868 Act, making in the interpretation clause the word "person" mean a company, firm, or individual, thus compelling the owner or owners to be qualified persons; as I consider it impracticable to carry out the penal clauses of the Act where the seller alone is held responsible.
7. Not at present.
8. No.
9. I am not prepared to give any practical proposal for their modification.
10. I think they are vigorously administered.
11. Yes; and do not think such experiments are intended to be made.
12. —

Mr. A. Nichol replies privately.

Mr. Anthony Nichol, Carlisle, sends us replies to our questions, but makes the curious condition that they are "not for publication."

The Use of Methylated Spirit.

Sir,—It may interest your readers who are familiar with the methylated spirit question to give my experience with the Excise department.

About six weeks ago our Blackburn supervisor came to examine "request book" for methylated spirit, and asking me if I used the spirit for making any preparation I told him that I used it for soap, aconite, belladonna, and camphor (com.) liniments. He forbade me to use it again, as he said it was illegal if there was no bond. Not wishing to bother about it, as I did not use a gallon a year of those liniments, I issued orders that no more must be made on the premises, but bought frem some wholesale house. About three weeks after he brought word that I could use it for making the above liniments. Not wishing to be subject to any further annoyance, I asked him to let me know the law respecting making polish; whether I could make it from "finish" or not without giving bond. He refused to give a definite answer, and then I told him that I would write to Somerset House and get a definite answer once for all.

Accordingly I wrote, and gave them the whole facts of the case, and giving them formulæ for varnish both with "finish" and with "spirit" (that with "finish" having simply 3 oz. less shellac to gallon of varnish), and telling them that our district supervisor would give me no straight answer. About three weeks after the reply, of which the following is a copy, came :—

[Copy.]

9067/1889 C "Inland Revenue,
"Somerset House, London, W.C.,
"26 April, 1889.

"Sir,—In reply to your letter, dated the 1st inst., I am directed by the Board of Inland Revenue to acquaint you that in the circumstances they will allow you to use annually a small quantity of methylated spirits in the manufacture of polish, without requiring you to enter into the usual bond for the proper use of methylated spirit, so long as you hold a licence to retail such spirit, and do not keep a larger stock than fifty gallons. I am, sir, your obedient servant,
"W. B. Heberden, Assist. Secretary."

Such correspondence then settles the matter *re* bonds, &c., as far as I am concerned. Our supervisor seemed rather surprised, but could not question the official authority. I may also add that I have received permission, "as an indulgence," to show a glass still in action in the shop window, distilling coloured or dirty water. Yours faithfully,
Jos. Hindle.

[We published an official announcement on March 30, 1889 (page 417), to the effect that the Board of Inland Revenue would not require bond from a retailer of methylated spirits in respect of the preparation of soap, compound camphor, aconite, and belladonna liniments.—Ed. *C. & D.*]

Liquid Otto of Rose.

Sir,—Failing the production of a pure non-freezing otto, I would as the result of an experience of some months recommend that the ordinary commercial article be mixed with chloroform in the proportion of 1 to 3 vols. A less proportion than one-fourth will not suffice during the winter months. The presence of the chloroform, which has of course to be allowed for, does not in any way militate against the use of the otto so treated. In most cases it escapes during its admixture with such things as tooth-powders, pomades, &c. The result is a saving of time and avoidance of risk.

Weymouth. Tho. B. Groves.

The Lipscombes.

Sir,—With reference to the letter at page 633 in your issue of May 4, will you kindly permit me to state that the addresses, "233 Strand and Queen Victoria Street," given in the official report of my application for discharge, were perfectly correct at the period of bankruptcy. If it had not been for my unfortunate "connection" with the business of my late father, Mr. Frederick Lipscombe, of the address in question, I should never have had occasion for any such "application." Yours truly,
H. R. Lipscombe.

Protecting the Price of Patent Medicines.

Sir,—You will see from the inclosed cutting that Messrs. Powell's elaborate scheme for the prevention of "cuttiug" does not prevent "Moonseed Bitters" being sold at reduced prices, in Hull at any rate. Either the firm in questiou is losing money on every bottle sold, which is hardly likely, or there exists some method by which Messrs. Powell's good intentions can be checkmated. I may add that I have obtained one of their price-lists, but do not find "Moonseed Bitters" quoted in it.

Perhaps Messrs. Powell can explain how the above comes about. Yours faithfully,
Yorkshire. (43/44)

The cuttiug sent is an advertisement from the *Hull Daily News*, in which Taylor's Drug Company announces "Moonseed Bitters at reduced prices."

Popular Remedies.

"During my Easter perigrinations," writes a correspondent from Cheshire, "I learned that a farmer suffering from diabetes was cured by the use of a tea made with watercress, and by eating whole-meal bread."

A correspondent of a Plymouth paper says, "I have been hearing lately of marvellous cures of rheumatism, brought about by a simple decoction of burdock root, taken three times a day ten minutes after a meal. The burdock is one of our commonest weeds. Everybody knows the burrs which sportive little lads in the country throw at you, and which stick on your woollen clothing. That is the great specific. I cannot say the decoction looks inviting. It rather resembles a mixture of copying-ink and water; but the appearance is worse than the taste. It is only a little mawkish, resembling in some degree the flavour Sam Weller assigned to the Bath waters—namely, that of warm flat-irons. Everybody can dig his own specific for himself; but there is a brisk demand for burdock root at the herbalists, too."

The Episcopal Bishop of North Carolina, Right Rev. Dr. Theodore B. Lyman, writes to the *Raleigh Daily News and Courier*, that having suffered greatly from sleeplessness for nearly two years, he completely cured his disorder by nightly eating a half-pint of freshly roasted peanuts, afterwards drinking a glass of fresh, sweet milk, and then going immediately to bed. The peanuts should be measured and roasted in the shell.

A Thymol Spray.

SIR,—We had the following to dispense to-day:—

Thymol	grs. xij.
Alcohol	℥iv.
Glycerine	ʒiv.

M. et adde aq. dest. ad ℥xij. Sig.: "The Spray."

On adding the water the thymol is thrown out like camphor. Can any of your readers offer a suggestion? and oblige,

Yours truly,
DISPENSER. (44/19.)

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

40/68. **Cucumber Ointment.** September 15, 1888.

40/68. **Jockey Club Perfume.** January 14, 1888, page 51.

35/60. **Fly and Maggot Oil.** October 8, 1887, page 468.

38/63. **Egg Powder.** DIARY, page 259.

42/58. **Nursery Hair Lotion.** DIARY, page 171.

44/29. **Infant's Food.** See page 94 of the current volume.

272/9. *Fustic.*—We give a formula for **Brown Hair-dye** in the DIARY. Another good one is:—Nitrate of silver, 15 grains; sulphate of copper, 4 grains; strong solution of ammonia, a sufficiency. Dissolve the solids in 2 drachms of water, and add solution of ammonia until the precipitate is redissolved, then make up to 1 oz. with water.

41/61. *A. P. S.*—We understand that the Society is not enamoured of the diploma business. But in any case we think the subject is hardly suited for discussion in this journal.

38/73. *Ophthalmic.*—Mr. H. Collier, Teacher of Pharmacy at Guy's Hospital, favours us with the following formulæ for preparations prescribed by Mr. Higgins, of that institution:—

Ung. Hydrarg. Oxidi Flavi c. Atropinâ.

Hydrarg. oxid. flav.	gr. ij.
Atropinæ sulph.	gr. ¼
Paraffin. mollis.	ʒj.

M.

Mist. Hydrargyri Perchloridi.

Liq. hyd. perchlor.	♏80
Inf. quassiæ ad	℥j.

M.

40/24. *J. Kirkpatrick.*—(1) **Colza Oil** is as good as any for burning in **Bicycle Lamps.** Sperm oil is, of course, the best, but may be too expensive. (2) For lubricating bicycles, 2 parts of heavy mineral oil and 1 part of olive oil make a good mixture.

40/45. *Denticurè.*—We do not have the formula for Blair's gout and rheumatic pills.

40/68. *Glycerine.*—**Florida Water.**—Oils of lavender and bergamot, of each 4 oz.; oil of neroli, 2 drachms; oil of orange, 4 drachms; oil of cloves, 1 drachm; musk, 4 grains; cologne spirits, ½ gallon; water, ½ gallon. Macerate for a week, and filter through magnesia.

39/2. *Pluvialis.*—The latest edition of Begbie's "Medical Information and Advice" is the twenty-fifth thousand (1888).

38/63. *Confectioner.*—(1) Baking powder: Tartaric acid, 14 oz.; bicarbonate of soda, 16 oz.; rice flour, 2 lbs. Dry the acid and soda separately, and mix with the flour. (2) See head paragraphs. (3) Hard paraffin may be moulded into sticks and sold as **Starch Gloss.** It makes a very good gloss indeed. (4) A solution of sulphate of iron (20 grains to the ounce, with the addition of ½ drachm of aromatic sulphuric acid, is a good application for ringworm. (5) The old lac sulphuris is the best for hair restorer. Please read the journal more carefully. You ask us for information which has been given quite recently, and we cannot repeat it.

41/64. *Chlorodyne.*—We never heard of the substance you name as a **Remedy for Gapes in Hens.** It is generally admitted that this is a trouble which is not easily cured; it is due to the presence of worms in the wind-pipe, and to destroy these, as for example by the fumes of carbolic acid, you run the risk of killing the hen. On the whole the best plan is to kill the birds which are affected, in order to prevent the disease spreading to healthy birds. A harmless medicine is sulpho-carbolate of soda in 2-grain doses, made into a pill with cubeb and copaiba paste.

43/19. *Alpha.*—The statement is meaningless and nonsensical. We shall have an article on the subject. (2) **Neat's Foot Oil** is made by boiling cleaned ox hoofs (freed from the sinews) in water, when the oil rises to the surface along with a solid fat which separates on cooling. The oil should be freed from this solid fat.

39/55. *W. F. Harvey* submits the following query for insertion:—

I wish to soak pieces of linen in a chemical solution which will then be a pink colour, but which if held to the fire will be changed by the heat to blue. What chemical must I use?

40/10. *F. Bros.*—**Violet Soap.**—This should be a palm-oil soap with 7 lbs. per cwt. of powdered orris root added to it, and the following perfume:—Oil of lemons, 6 oz.; oils of rhodium and thyme, of each 3 oz.; tincture of musk, 6 oz.

33/60. *Fox's Lungs.*—A Newcastle-on-Tyne correspondent sends the following as the formula for this preparation:—

Diapente.
Elecampane.
Camphor.
Powdered liquorice.
Powdered ginger.
Powdered aniseed.
Extract of liquorice, of each equal parts.
Mix, and add sufficient water to make a paste.

42/62. *W. C. S.*—The result of the political competition was published in this journal of January 5, 1889.

258/49. *R. S.* (Odessa).—Insect-flowers are called "Insekten blüthen" in German. We believe A. F. Braulich & Co. and Julius Stettner to be among the principal dealers in the article in Trieste.

43/43. *J. Templeton.*—You will find a list of books for the Minor examination in our Educational number, September 22, 1888.

43/23. *Rex.*—To **Fasten Labels on Tin**, the metal surface should first get a coat of varnish; then use any of the pastes for which we give formulæ in page 176 of the DIARY.

43/56. *Iodi.*—(1) If you read page 635 carefully you will see that we did answer the liquid dentifrice query. We prefer the dentifrice made with quillaia, which gives a more lasting foam. (2) We do not at present recall the name of a book of the kind.

43/38. *Timon.*—(1) We cannot say. (2) Perchloride of mercury, in the proportion of 2 grains to 1 pint, preserves liquid gum, and is used by some makers.

43/55. *Dentist* must observe our rules before his queries are attended to.

43/44. *Yorkshire.*—(1) **Homœopathic Spirit of Camphor** (Rubini's) contains 1 part of camphor in 2 parts. (2) **White Hard Spirit Varnish.**—Sandarach, 5 lbs.; camphor, 2 oz.; glass, in coarse powder, 3 lbs.; spirit, 7 quarts. Shake well for a few minutes each time every hour during the course of a day; then add 1 quart of Canada balsam, again shake well, and, when settled, strain. (3) Try either B. Noakes & Co., the Self-opening Tin-box Company, or Goodall, Backhouse & Co. (all of whom advertise in this journal) for tin boxes.

43/65. *Omega* writes:—**Fruit-preserving with Chloroform**, as first suggested, answers admirably. The proposal to use cotton-wool is certainly not an improvement nor necessary; it would absorb all the juice which, after some months, exudes from the fruit. Simply put the fruit into a jar, pour on chloroform (about ½ dr. to lb.), and then close the jar as hermatically as possible.

44/7. *East Anglia.*—**Syr. Ferri Lemonad.**—Probably by this is meant *ferri ammon. citratis*, the Codex formula for which is—

	Grammes
Ammonio-citrate of iron	25
Cinnamon water	25
Simple syrup	950

Mix.

44/58. *Spiteful.*—(1) You must pass algebra and Euclid at one examination, but you may take mechanics afterwards. (2) Apply to the secretary of the Pharmaceutical Society, 17 Bloomsbury Square, London, who will doubtless repeat the information.

44/59. *Ernst.*—(1) **Label Varnish.**—Make a solution of 4 oz. of resin and 1 drachm of camphor in 5 oz. of spirit, and add ½ an oz. of Canada balsam. Allow to stand until clear. Canada balsam thinned with turpentine also makes an excellent varnish. (2) French and German prescriptions may occur in the prescription-books which are submitted to Minor candidates at the examinations, but the examiners are not justified in examining candidates as to their knowledge of the languages, and we feel pretty sure that they do not. What is done is to ask the candidates to state the quantities, doses, &c., and you must not forget that even French and German prescriptions may be written in Latin.

34/67. *J. L.*—Your **Horse-condition Powder** is, as far as can be made out, composed of sugar, ground locust-beans, caraway, and fenugreek.

44/53. *Kimia.*—It is impossible to say what the component parts of the hair lotion are. Acetic acid is the principal, and, doubtless, the active, ingredient.

42/8. *J. F. D.*—Strychnine is the best poison for rats if you can get them to eat it. It should be mixed with barium carbonate, and flavoured with a trace of anise. Of course, you cannot expect the rats to die on the spot; there are few poisons which can be used which will be so effective as that.

37/72. *T. W. G.*—**To Exterminate Ants.**—The haunts should be sprinkled with quicklime containing a twentieth of its weight of powdered camphor. Paraffin oil has also been suggested, and there is nothing more effective than a "Demon" beetle-trap baited with sugar.

42/53. *W. H. J.*—The following is the formula for **Botanic Beer Extract** which appeared in our issue of October 6. Extracts of horehound and chamomile, of each ½ oz.; extracts of taraxacum and hops, of each 6 drachms; extract of gentian, 1½ oz.; extract of liquorice, 1 oz.; gingerin, 1 drachm; glycerine, 8 oz.; burnt sugar, 12 oz.; treacle, 12 oz.; concentrated infusion of quassia, 12 oz.; water, sufficient to make 54 oz. If the preparation is to be kept long add 1 drachm each of salicylic acid and borax. One ounce of the extract is sufficient for 2 gallons of water.

41/46. *K. J.*—If the bottles referred to bear the name or trade-mark of the firm who first use them, it would be actionable under the Merchandise Marks Act if any other firm buying such bottles second-hand should use them again for any similar manufacture, or in any way calculated to mislead purchasers.

A NEW KIND OF SORE THROAT has been added to laryngology. It will keep the clergyman's sore throat company, for it is nothing else than the school-teacher's sore throat. It is supposed to arise from the foul atmosphere of crowded schoolrooms, combined with the irritating influences of the chalk from the blackboards.

A NEW METAL.—At the last meeting of the Imperial Mineralogical Society of Russia, Mr. K. D. Chrustschoff announced the discovery of a new metal, to which he has given the name *Russium*. The properties of the metal show that it is one of those the discovery of which was predicted by Mendeleeff in formulating his periodic system. It is allied to thorium, so that it will occupy one of the blanks in the twelfth series of the system.

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WITH VITRIFIED (burnt in) LABELS

(Black Letters on a ground of Pink or White Enamel).

Labels indestructible and of elegant appearance, forming an even surface with the glass or porcelain. The Jars of best porcelain, thoroughly greaseproof. The Bottles hand-made and of superior quality. Both are unsurpassed by anything in the market in every respect. Also a CHEAPER sort of Bottles and Jars, with labels equally indestructible, but very plain, especially suitable for Dispensaries, &c. Intending Buyers are requested to inspect Samples at

H. POTHS & CO.,

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A large number of Shops have been fitted up with these Bottles and Jars, both in England and the Colonies, a list of which can be had on application.

LATEST NOVELTIES:

POISON BOTTLES of Ribbed Blue Glass, with RAISED White Vitrified Letters, and the Word "POISON" in Red at foot.
DRAWER LABELS of Crystal Glass, with Bevelled edges and Vitrified Labels to match the above Bottles and Jars.
A STANDARD LIST OF LABELS for Chemists' Shop Bottles, Jars, and Drawers will be sent free on application.

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This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time. **Price in Winchester Quarts, 3s. per lb., net.**

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USES.—INTERNALLY: In Dyspepsia and Gastralgia. Geo. Herschel, M.D.Lond., writes in the *British Medical Journal*, April 3rd, 1886:—"I find it chiefly valuable in (1) the Chronic Stomach Catarrhs of Children, (2) Acid Dyspepsia, and (3) Severe Gastric Pain coming on shortly after eating." Recent experiments made by Prof. Finkler, and published in *The Lancet*, July 23rd, 1887, show that Papaïn digests far more energetically than best Pepsin, when the solution is concentrated *as it exists in the human stomach.*

EXTERNALLY: It has been used by *Bouchut* in *cutaneous carcinoma*, *Rossbach* for dissolving the false membranes of *Diphtheria* (see *Zeitsch. für Klin. Med.*, vi., H. 6), by *Jacobi*, of New York, for the same purpose, and recently Prof. Finkler himself has restored patency to an œsophagus occluded by *carcinoma* by the continuous administration of a solution.

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For the convenience of dispensing PAPAÏN (FINKLER) these pills are made up in bottles of 25, 50, and 100 (one and two grains each), in convenient shapes for carrying in the pocket.

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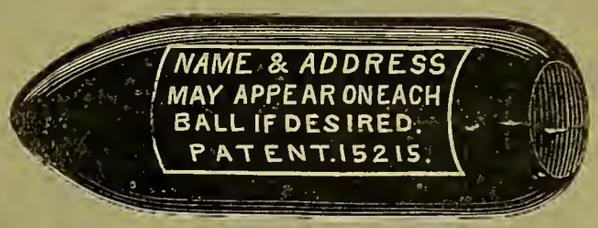

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„ 16.—Cough Balls	27/	„
„ 17.—Cough Balls	27/	„
„ 8.—Diuretic Balls	24/	„
„ 9.—Fever Balls...	24/	„
„ 1.—Physic Balls	24/	„
„ 2.—Physic Balls	30/	„
„ 3.—Physic Balls	36/	„
„ 18.—Physic Balls	42/	„
„ 19.—Physic Balls	48/	„
„ 15.—Stimulating Balls	24/	„
„ 10.—Tonic Balls...	24/	„
„ 11.—Tonic Balls...	20/	„
„ 13.—Worm Balls	30/	„
„ 14.—Worm Balls	60/	„

PRIVATE FORMULÆ.

WYLEYS & Co. will be glad to prepare Patent Duraplastic Balls from private recipes.

SEQUAH, LIMITED, desire to call the special attention of the Trade to their Preparations—

SEQUAH'S PRAIRIE FLOWER,

SEQUAH'S OIL,

which have an immense sale all over Great Britain. They wish to point out the fact that all vendors of their Preparations are bound by agreement to Retail Goods at ONE SPECIFIED PRICE ONLY, thus ensuring a fair profit to the Trade, and a mutual protection to manufacturers and retailers.

SEQUAH, LIMITED, 46 FARRINGDON STREET, LONDON.

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE

GENUINE

DR. JOHN HOOPER'S PILLS,

Which may be known by the Name of the Inventor being on the Government Stamp.

Handbills and Show Cards will be sent on application to

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

AMERICAN BUYERS are particularly Cautioned ! !

Telegraphic Address—"FEEDING BOTTLES LONDON."

C. R. HARKER, STAGG & MORGAN

WHOLESALE & EXPORT DRUGGISTS

MANUFACTURING CHEMISTS

IMPORTERS & DISTILLERS of ESSENTIAL OILS

PHARMACEUTICAL EXTRACTS—FLUID AND SOLID.

STANDARDIZED AND GUARANTEED DRUGS AND PREPARATIONS.

15 LAURENCE POUNTNEY LANE, & ARTHUR ST. WEST, LONDON, E.C.

REGISTERED ADDRESS FOR TELEGRAMS—"EDULCINE LONDON." Telephone No. 1949.

YOUNG & POSTANS. BISMUTH, PEPSINE & STEEL

GRAN. EFFER. BISMUTH AND PEPSINE
GRAN. EFFER. BISMUTH, PEPSINE AND STRYCHNINE
GRAN. EFFER. BISMUTH, PEPSINE AND QUININE
GRAN. EFFER. BISMUTH, IRON AND QUININE
GRAN. EFFER. BISMUTH CITRATE
GRAN. EFFER. BISMUTH, IRON AND STRYCHNINE
GRAN. EFFER. CITRATE OF CAFFEINE.
GRAN. EFFER. IRON AND BISMUTH
GRAN. EFFER. IRON, QUININE AND STRYCHNINE
GRAN. EFFER. IRON AND ARSENIC
GRAN. EFFER. IRON AND PEPSINE
GRAN. EFFER. IRON AND QUININE
GRAN. EFFER. IRON, QUININE AND PEPSINE
GRAN. EFFER. HYDROBROMATE OF CAFFEINE.

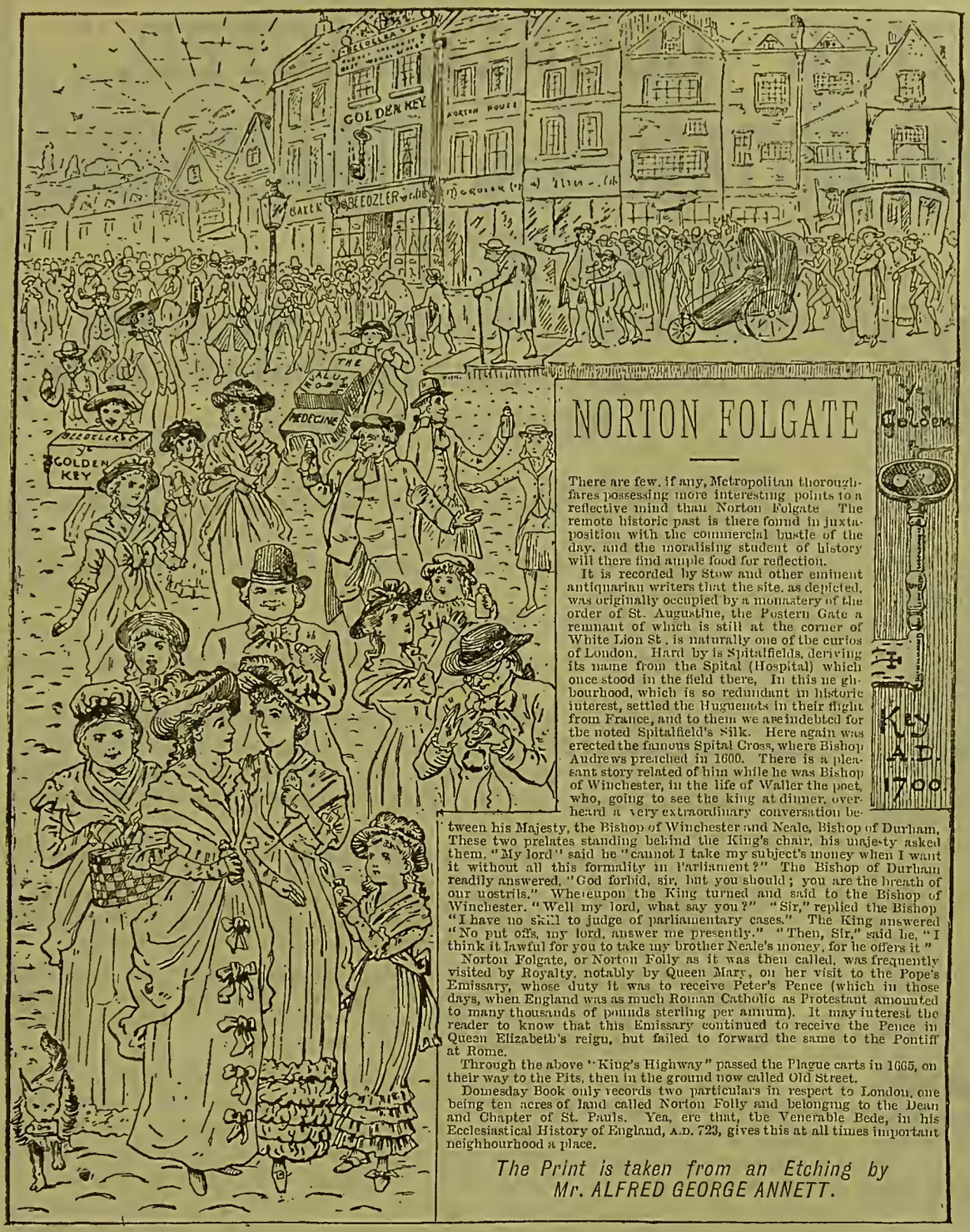
AND ALL OTHER GRANULAR PREPARATIONS.

Now prepared only by **CURTIS & COMPANY**, 48 Baker Street, Portman Square, LONDON, W.

GRANULAR EFFERVESCENT ANTIPYRIN.

(Each Teaspoonful contains 8 grains.) Introduced by Curtis & Co.

See that this preparation bears our name.



NORTON FOLGATE

There are few, if any, Metropolitan thoroughfares possessing more interesting points to a reflective mind than Norton Folgate. The remote historic past is there found in juxtaposition with the commercial bustle of the day, and the moralising student of history will there find ample food for reflection.

It is recorded by Stow and other eminent antiquarian writers that the site, as depicted, was originally occupied by a monastery of the order of St. Augustine, the Postern Gate a remnant of which is still at the corner of White Lion St., is naturally one of the curios of London. Hard by is Spitalfields, deriving its name from the Spital (Hospital) which once stood in the field there. In this neighbourhood, which is so redundant in historic interest, settled the Huguenots in their flight from France, and to them we are indebted for the noted Spitalfield's Silk. Here again was erected the famous Spital Cross, where Bishop Audrews preached in 1600. There is a pleasant story related of him while he was Bishop of Winchester, in the life of Waller the poet, who, going to see the king at dinner, overheard a very extraordinary conversation between his Majesty, the Bishop of Winchester and Neale, Bishop of Durham. These two prelates standing behind the King's chair, his majesty asked them, "My lord" said he "cannot I take my subject's money when I want it without all this formality in Parliament?" The Bishop of Durham readily answered, "God forbid, sir, but you should; you are the breath of our nostrils." Whereupon the King turned and said to the Bishop of Winchester. "Well my lord, what say you?" "Sir," replied the Bishop "I have no skill to judge of parliamentary cases." The King answered "No put offs, my lord, answer me presently." "Then, Sir," said he, "I think it lawful for you to take my brother Neale's money, for he offers it."

Norton Folgate, or Norton Folly as it was then called, was frequently visited by Royalty, notably by Queen Mary, on her visit to the Pope's Emissary, whose duty it was to receive Peter's Pence (which in those days, when England was as much Roman Catholic as Protestant amounted to many thousands of pounds sterling per annum). It may interest the reader to know that this Emissary continued to receive the Pence in Queen Elizabeth's reign, but failed to forward the same to the Pontiff at Rome.

Through the above "King's Highway" passed the Plague carts in 1665, on their way to the Pits, then in the ground now called Old Street.

Domesday Book only records two particulars in respect to London, one being ten acres of land called Norton Folly and belonging to the Dean and Chapter of St. Pauls. Yea, ere that, the Venerable Bede, in his Ecclesiastical History of England, A.D. 723, gives this at all times important neighbourhood a place.

The Print is taken from an Etching by Mr. ALFRED GEORGE ANNETT.

AN ASSORTED GROSS, £4 10 0.

JOHN BEEDZLER & CO.

WHOLESALE AND RETAIL CHEMISTS,

18 NORTON FOLGATE, E.C.

(Opposite Worship Street, and near the Bishopsgate Low Level Station.)

AS SOLD AT YE GOLDEN KEY FOR 200 YEARS.

MIXTURE FOR THE BLOOD, 13½*d.* and 2*s.* 9*d.*

SALUBRIOUS SALINE, AN EXCELLENT PYRETIC FROM FRUIT SALT. 1*s.* and 2*s.*

HOPS BITTERS, 1*s.* 0½*d.* and 2*s.*

PAIN KILLER, 13½*d.* and 2*s.* 9*d.*

ALL HEAVENS' SAINTS' OIL, 13½*d.* and 2*s.* 9*d.*

CHLORODYNE, 13½*d.* and 2*s.* 9*d.*

GOLDEN EYE OINTMENT, 13½*d.* and 2*s.* 9*d.*

SOOTHING SYRUP, 13½*d.*

ANTIDYSPEPTIC SYRUP, 13½*d.* and 2*s.* 9*d.*

MALTED FOOD, 1*s.*

GLYCERINE CUCUMBERS, 13½*d.* and 2*s.* 9*d.*

PENNYROYAL AND STEEL PILLS, 13½*d.* and 2*s.* 9*d.*

CASTOR-OIL PILLS, 13½*d.* and 2*s.* 9*d.*

COMPRESSED CHLORATE POTASH TABLETS, 6*d.* and 1*s.*

CORN PAINT, 7½*d.* and 13½*d.*

TANNIN THROAT GARGLE, 13½*d.* and 2*s.* 9*d.*

CRIMSON DISINFECTING FLUID, 6*d.* and 1*s.*

PERSIAN INSECT POWDER, 6*d.* and 1*s.*

OBESITY PILLS, 1*s.* and 2*s.* 6*d.*

SULPHUR LOZENGES, 13½*d.* and 2*s.* 9*d.*

ESSENCE FOR DEAFNESS, 13½*d.* and 2*s.* 9*d.*

ETC. ETC. ETC.

"CUTTING COUNTERACTED."

MOONSEED BITTERS brings FULL PRICES.

WHY?

Because every one who retails Moonseed Bitters has to sign an Agreement or Contract in the following terms:—

MOONSEED BITTERS.

Above is Facsimile of

THE WRAPPER LABEL

of the 2/9 size.

It is also sold at 4/6.

MOONSEED OINTMENT.

Retails at 1/1½, 2/9, 4/6 per box.

Memorandum of Agreement made this.....day of..... 1889, between A. E. POWELL & COMPANY, of Swindon in the County of Wilts, Proprietors of the Moonseed Bitters and Moonseed Ointment (hereinafter called the "Vendors"), of the one part and ..... of ..... (hereinafter called "the Purchasers"), of the other part.

Whereby it is mutually agreed between the said parties hereto as follows:—

In consideration of the Vendors selling to and supplying the Purchasers with Moonseed Bitters, Moonseed Ointment, and other preparations manufactured and sold by them (hereinafter termed "the Goods") at their usual prices, the Purchasers will observe and perform the following terms and conditions:—

1. The Purchasers to sell the Goods retail for full printed prices only, and for each and every Bottle or Box of Moonseed Bitters, Ointment, or Pills sold by him or them at any less price, without the written consent of the Vendors, the Purchasers shall pay to the Vendors the Sum of Twenty Shillings in the nature of a penalty, to be recoverable as ascertained liquidated damages.

2. The Purchasers not to supply any Wholesale House nor to sell the Goods wholesale to any Chemist or Druggist or Medicine Vendor who will not previously enter into an Agreement to retail the same at prices in accordance with the preceding Clause No. 1 of these presents.

All Purchasers who have signed a similar form of Agreement to the foregoing will be supplied upon the Vendors' usual trade terms, but those Purchasers who do not sign a similar form of Agreement to be supplied upon the following terms only, namely:—RETAIL, 4*s.* 5*d.* for each and every 4*s.* 6*d.* Box or Bottle, 2*s.* 8*d.* for each and every 2*s.* 9*d.* Box or Bottle, and 1*s.* 0½*d.* for each and every 1*s.* 1½*d.* Box or Bottle—net in all cases. WHOLESALE, 4*s.* 4*d.* for each and every 4*s.* 6*d.* Box and Bottle, 2*s.* 7*d.* for each and every 2*s.* 9*d.* Box or Bottle, and 11½*d.* for each and every 1*s.* 1½*d.* Box or Bottle—net in all cases. This Agreement and the terms and conditions herein contained to remain in full force and virtue for the term of 7 years from the first day of March, 1889.

As witness the hands of the said parties hereto the day and year first above written.

We call attention to the important steps which we have taken to prevent our specialities being retailed at less than the advertised prices, and we ask the co-operation of the Trade in maintaining the integrity of the scheme whereby the sale of our preparations may always be retained by the legitimate trade. We will not only endeavour, by all means in our power, to prevent the advertised prices being "CUT," but will give Chemists every assistance and facility for making this a large as well as a paying business.

Please write for Terms and Form of Agreement. NOTE that we allow retailers of Moonseed Bitters 2*s.* 6*d.* per thousand for the Distribution of Pamphlets.

A. E. POWELL & CO., SWINDON.

IMPORTANT NOTICE

PLEASE OBSERVE that, as the leading Wholesale Houses have now signed our contract, we no longer pay carriage through Messrs. Edwards & Son or any other house. Our goods being obtainable through these sources we can no longer fill retail orders, and we have to ask respectfully that such orders be entrusted to the Wholesale Houses.

Further, in the course of this week all the Houses who hold stock will receive supplies of our certificate, which is to be sent to the Wholesale Dealer when ordering. Chemists will please make a note of this, and apply to us for the form of agreement, as, if the terms of the certificate are not complied with, the goods are charged on the higher scale—that is to say, the prices charged to "cutters," viz., 4/5, 2/8, and 1/0½ per box or bottle.

We respectfully call the attention of the Drug Trade to the Terms of the Agreement as given on the opposite page, and ask their support in maintaining prices and in extending the profitable sale of the article. [1]

A. E. POWELL & CO.
SWINDON.

DR. LALOR'S PHOSPHODYNE

For TWENTY-FIVE YEARS has maintained its world-wide reputation as THE ONLY SAFE RELIABLE PHOSPHORIC REMEDY ever discovered for the Permanent Cure of Brain Wreckage, Paralysis, Sleeplessness, Harassing Dreams, Premature Decay of Vital Power, and all Functional and Diseased Conditions of the System dependent upon the Deficiency of the Vital Forces. It

Cures Dyspepsia, Nerve and Heart Disease.
Cures Kidney and Liver Complaints.
Cures all Blood Disorders.
Cures Consumption and General Debility.
Checks all Wasting of the Vital Forces, from whatever cause arising.

THE EFFECT of this Standard Phosphoric Remedy in Nervous Debility and its Kindred Evils is Immediate and Permanent, all the Miserable Feelings and Distressing Symptoms disappearing with a rapidity that is REALLY MARVELLOUS.

DR. LALOR'S PHOSPHODYNE

HEALTH, STRENGTH, AND ENERGY.

Is the only Medicine of the kind or name awarded a Certificate of Merit at the Calcutta Exhibition, 1883-4, where all Countries were Exhibitors, and the only Trade Mark—"PHOSPHODYNE"—Registered and Protected under the Trade Marks Act.

THOUSANDS of unimpeachable Testimonials from all parts of the World, and from the highest Medical Authorities, prove conclusively the Verdict Universal that in the World of scientific research no other Phosphoric Preparation has received such exalted praise and distinguished recognition.

Full Printed Directions for the guidance of Patients in the Self-Treatment of the above Diseases are enclosed with each Bottle.

Sold in bottles at 4s. 6d. and 11s. by all Chemists throughout the World.

MANUFACTURED ONLY AT

DR. LALOR'S PHOSPHODYNE LABORATORY, HAMPSTEAD, LONDON, N.W.

DINNEFORD'S FLUID MAGNESIA

PERFECT IN PURITY AND UNIFORM IN STRENGTH.

The most efficacious antacid and mild aperient for Delicate Constitutions. Ladies, Children, and Infants.

OF ALL WHOLESALE DRUGGISTS.

J. ROBBINS & Co. 147 OXFORD ST.

METHYLENE.

Obtained by the action of Metallic Zinc on Chloroform and Alcohol.
Discovered to be a general Anæsthetic by Dr. RICHARDSON in 1867.
Bottles, 16s.; 8-oz., 8s. 6d.; 4-oz., 4s. 6d.; 2-oz., 2s. 6d

COMPOUND ANÆSTHETIC ETHER,
For producing Local Anæsthesia.
In 4-oz., 10-oz., and 20-oz. Stoppered Bottles, 2s., 4s., and 7s.

OZONIC ETHER.
In 2-oz., 4-oz., 8-oz., and 16-oz. Stoppered Bottles, 2s., 3s. 6d., 7s., and 1/

PEROXIDE of HYDROGEN.
First introduced as a Medicine by Dr. RICHARDSON.

ETHYLATE of SODIUM
Dr. RICHARDSON's Formula), for removing Nævi, &c. In ½-oz. & 1-Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. &

STYPTIC COLLOID,
For promoting the Healing of Wounds by the first intentio
In 2-oz. and 4-oz. Bottles, with Brush, 2s. 6d. and 4s. 6d.; 16-oz., 12s.

CHARCOAL CAPSULES
Containing Pure Vegetable Ivory Charcoal.
In Boxes, 2s. 6d. each.

J. ROBBINS & Co. OXFORD ST. 147

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LEO & CO.

MANUFACTURERS OF

COMPRESSED

CHLORATE OF POTASH,

Chlorate of Potash and Borax,

&c., &c.

Our Goods are guaranteed the Best of any of the cheap Compressed Goods in the Market.

They are supplied by all the Wholesale Houses.

Quotations given for large and small quantities.

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ESTABLISHED 1837.

H. TROMMSDORFF,

MANUFACTURING CHEMIST,

ERFURT.

SPECIALITIES:

ALKALOIDS

Aconitine,	Duboisine,
Arbutine,	Helleboreine,
Atropine,	Hyoscyamine,
Cantharidine,	Nicotine,
Chrysarobine,	Picrotoxine,
Coniine,	Solanine,

Veratrine.
And all other Alkaloids.

PURE CHEMICALS

For Pharmaceutical, Scientific, and Technical purposes.

SOZOIODOL PREPARATIONS.

Sole Agent for the U.K. and the Colonies:

FREDERICK BOEHM, LONDON,
27 Billiter Square Buildings.

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

BEECHAM'S PILLS.

They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.

BANNER'S LIVERPOOL

SUMMER SEASON SPECIALITIES.

GRANULAR EFFERVESCENT CITRATE OF MAGNESIA.

DALMATIAN INSECT POWDER

(FROM CLOSED FLOWERS).

1-cwt. Case of Tins Mag. Cit. Gran. Effer. at 6½d. per lb. | 28-lb. Tins Mag. Cit. Gran. Effer. at 7d. per lb.

GREAT REDUCTION!

NEW AMERICAN OIL OF PEPPERMINT, NOT deprived of its Menthol, 8s. 9d. per lb. An original 22-oz. bottle free by parcel post for 12s. 6d.

8-oz. Capsuled E. I. Mustard Seed Oil, branded "Star of India" on Capsule, bottle ... ... 8/9 per doz.
4-oz. Capsuled ditto, ditto ... ... 5/6 " "
28-lb. tins Dalmatian Insect Powder ... 1/2 per lb.
56-lb. tins Chilian Honey ... ... -/3 " "
10-lb. tins Super Ess. Lemon ... ... 5/6 " "
7-lb. pottle P. Rhei E. I. Elect ... ... 3/- " "
56-lb. Bale Senna T.V. ... ... -/3¼ " "
4½-gallon tins finest non-freezing Norwegian Cod Liver Oil ... ... 4/6 per gal.

CIRCASSIAN SWEET OIL. — 40-gallon barrel, bright and clear as COLZA OIL—1s. 6d. per gallon (for Hair Oil, &c.); sample 9-gallon tin for 15s.

40-lb. tin Baseline Petro. Jelly (firmer than Vaseline) ... ... -/4 per lb.
(Best Ointment and Pomade basis.)

Dozen Pure Menthol Cones, in neat turned wood boxes ... ... 2/- per doz.

One-Gross case 3*d.* size "Struck down Dead" Vermin Killer, with "Poison Register," for 10/6.

GOOD MERCHANTABLE QUALITY GUARANTEED.

E. R. BANNER, DRUG MERCHANT, **56 BOALER STREET, LIVERPOOL.**

41

DRUGS, CHEMICALS, AND PHARMACEUTICAL PREPARATIONS

BARRON, SQUIRE & CO.

(LATE DREW, BARRON, & CO.),

WHOLESALE & EXPORT DRUGGISTS,

BUSH LANE, LONDON, E.C.,

MANUFACTURERS OF ALL DESCRIPTIONS OF PHARMACEUTICAL PREPARATIONS,

Beg to inform Merchants, Shippers, &c., that all Indents entrusted to them will receive careful attention and prompt execution.

Messrs. B., S. & Co. request the attention of their friends and the Trade, at home and abroad, to their having PURCHASED THE BUSINESS of Messrs. JAMES BASS & SONS, Hatton Garden, and with it the various Formulæ from which their Special Preparations have been made, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.

TO CASH BUYING CHEMISTS.

FIRST COME FIRST SERVED.

SURPLUS STOCK. SPECIAL OFFERS FOR CASH WITH ORDER ONLY. SUBJECT TO BEING UNSOLD.

Orders executed in the rotation received. Cash will be returned where goods are sold out.

1/6 Albion M. & S. Soap	per doz. 10/3	— Zonweiss	per doz. 7/
1/1½ Warner's Safe Pills	„ 8/8	2/ Gibson's Furniture Cream ..	„ 12/
/6 „ Safe Yeast	„ 3/6	1/6 Cleaver's Terebene Soap ..	„ 10/
/6 Diamond Dyes	„ 3/2	1/1½ Woodward's Gripe Water ..	„ 8/6
1/6 Lineham's Hair Regenerator ..	„ 9/6	1/1½ Kompo	„ 8/6
4/6 Barclay's Bouillon	„ 33/	1/6 Boxes Wright's Coal Tar Soap	„ 10/
1/6 Boxes W. & G.'s Old B. W. Soap	„ 9/6	2/ Atkinson's Perfumes	„ 14/
4/6 Vin Mariani	„ 33/3	3/6 „ „	„ 24/6
1/ Tetlow's Gossamer Toilet Powder	„ 7/3	/6 King's Food	„ 4/2
1/1½ Hall's Lung Restorer	„ 8/7	1/ „ „	„ 7/4
2/9 „ „ „	„ 22/6	2/6 „ „	„ 17/6

/6 King's Oatmeal	per doz. 4/2
/6 Bond's Ink with Stretcher ..	„ 2/8
1/ „ „ „ „ ..	„ 5/4
/6 Spratts Dog Soap	„ 3/3
1/1½ Soden Mineral Pastilles ..	„ 9/9

4/6 Swift's Specific, 38/6; Dry, 18/6.
Dutch Drops, stamped, per doz., 3/3; per gross, 36/.
2/6 Lamplough's Saline, 22/6; 4/6, per doz., 41/.
2/9 Red Cross Pills .. .. .. per doz., 23/
1/1½ Reade's Essence Sulphur and Reade's Chest Balsam (both slightly soiled), per doz., 6/.

Camphor, English Refined, in ⅓ ounce blocks, per lb., 1/6.
Soy, E. I., per gn., 2/. Cerasin Yellow, per lb., /6; per cwt., 50/.
Bicarbonate Soda, Brunner, Mond's, 14 lbs. for /11, per cwt., 6/6.
Powdered Rhubarb, per 2-lb. bottle, 6/6, bottle included.
Permanganate of Potash Crystals, per lb., /9½.
Bicarbonate Potash Crystals, per lb., /4.
Powdered Cassia, Best, per lb., /5; 14 lbs. for 5/6.
Loofahs, Compressed, per doz., 1/.
Castor Oil, E. I., per lb., /3, per 40-lb. tin, 9/.

Essence Lemon, extra, per lb., 4/6; per 11-lb. copper, 4/3 per lb.
Orange Quinine Wine, P.B., made with Howard's Quinine, in bottles, 6 to gn., per doz., 14/; in bottles, 12 to 13 to gn., 7/ per doz.
Milk of Glycerine and Cucumber, 8/ per lb.
Blaud's Pills, 4 grs., coated, per gross, /6.
Ingram's Seamless Drab Enemas, complete in cedar-wood box, per doz., 27/.
Higginson's Disconnecting Enema, Green, in cedar-wood box, complete, per doz., 26/6.

ALL FREE ON RAILS LEEDS.

W. B. MASON, Wholesale Druggist, LEEDS.

London Office—CASTLE COURT, 26 HIGH HOLBORN. All Orders to be sent to Leeds.

INTERNATIONAL FISHERIES EXHIBITION, LONDON, 1883.

COD LIVER OIL,

The Only GOLD MEDAL

For British Exhibitors was awarded to

T. J. SMITH,

10 & 11 NORTH CHURCH SIDE, HULL.

Importer of Norwegian, Newfoundland, & other varieties.

Low Quotations on application. Delivered at London or Liverpool.

WARREN'S REFINED WOOL FAT

AN EXCELLENT REMEDY FOR SKIN DISEASES.

1*s.* 9*d.* per lb. In 4-lb., 7-lb., and 14-lb. Tins—Tins free.

A 1-lb. sample tin delivered free to any town in the United Kingdom on receipt of 2*s.*

Used constantly in Hospitals and other high-class Medical Institutions.

REPORT ON WARREN'S REFINED WOOL FAT.

By L.R.C.P.London, M.R.C.S.

"Whilst experimenting on the growth of certain germs, I made use of some of Warren's Wool Fat as a medium, but found that Tinea Tonsurans (Ringworm) which I was then investigating would not propagate in it; and although I have inoculated it with several kinds of moulds and microbes I have found no result. It seems to me that this is important, as the aseptic quality of the Wool Fat renders it very suitable for external purposes in cases associated with the growth of germs. The experiments were made in a moist atmosphere at the temperature of 95° to 99° F."

Wholesale London Agents—T. MORSON & SON,
31, 33, & 124 Southampton Row, Russell Square, London, W.C.

Proprietors—**A. & J. WARREN,**

Wholesale Druggists & Licensed Makers of Methylated Spirit & Finish,

23 & 24 REDCLIFF ST., BRISTOL.

COLTHURST & HARDING,

BALL DENOTES COLOUR OF PAINT.

BRISTOL—Manufactories: Phœnix Wharf and Temple Gate. Offices: Temple Gate. Telegrams: "Phœnix Bristol."

LONDON—Manufactory: Alpha Works, Millwall, E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

HARD LUSTROUS ENAMEL,

IN ALL THE ART SHADES.

For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

WHITE LEAD, ZINC WHITE, PAINTS & COLOURS OF ALL KINDS.

MIXED PAINTS READY FOR USE,

In Tins, 1, 2, 4, 7, and 14 lbs. each.

HIGH-CLASS VARNISHES

Of all kinds, for Coachbuilders, Decorators, &c.

OIL BOILERS, REFINERS & MERCHANTS.

Export Orders receive special and prompt attention.

EXTRACTS FROM

HAWLEY'S "COUNTER ADJUNCTS."

With Name and Address of Chemist printed.

ANTIPYRIN.

(DIMETHYLOXYCHINIZINE.) IN EFFERVESCENT GRANULES.

4-oz. bottles, 17*s.*; 6-oz. bottles, 24*s.*

VICHY & CARLSBAD SALTS.

IN EFFERVESCENT GRANULES.

We have now added both these popular Salts to our list of granular preparations, put up in such a form that the Chemist's Name and Address can be printed on the label.

PRICE.—**Carlsbad or Vichy.**—4-oz. bottles, 5*s.* 6*d.* per dozen: 6-oz. bottles, 8*s.* per dozen. **Lithia Citrate.**—4-oz. bottles, 8*s.* per dozen; 6-oz. bottles, 11*s.* per dozen. **Caffeine Citrate.**—4-oz. bottles, 10*s.* per dozen; 6-oz. bottles, 13*s.* 6*d.* per dozen.

HERBINE.

A concentrated Fluid Extract of various Herbs which have long been considered to act as tonics and purifiers of the system.

1/-

6d

GINGER BEER ESSENCE.

STYLE.—2-oz. and 4-oz. panelled flats, with engraved direction label, suitable for Chemist's own name and address. The large is wrapped; the small is plain.

PRICE.—6*d.* bottles, 3*s.* 6*d.* per dozen; 6 dozen, 3*s.* 3*d.*; 12 dozen, 3*s.* 1*s.* bottles, 6*s.* per dozen; 6 dozen, 5*s.* 9*d.*; 12 dozen, 5*s.* 6*d.* In bulk, 1*s.* 4*d.* per lb.; Wr. Quarts, 1*s.* per lb.

1/-

6d

EXTRACT OF

CUCUMBER & GLYCERINE.

STYLE.—In 2-oz. and 4-oz. panelled flats, with fancy label embodying a coloured design of the Cucumber plant, 1*s.* bottles, capsuled and wrapped in chocolate paper, with band; 6*d.* bottles sealed and wrapped in ordinary whitey-brown paper.

PRICE.—1*s.* bottles, 6*s.* 6*d.* per dozen; 6 dozen, 6*s.* 6*d.* bottles, 3*s.* 6*d.* per dozen; 6 dozen, 3*s.* 3*d.*

Name and Address 6d. dozen extra, or for 6 dozen FREE.

Full particulars of the above in the New (1889) Edition of "HAWLEY'S COUNTER ADJUNCTS," recently published, with many additions, post free on application.

Savaresse's Capsules.

SAVARESSE'S CAPSULES. SANDAL WOOD; COPAIBA.

Savaresse's Capsules, of membrane, each containing 15 drops Pure Maranham Copaiba Balsam, or, also of membrane, each containing 10 drops Purest Yellow Sandal Wood Oil. The efficacy of these valuable medicines is due to the absolute purity of the Balsam or Oil, and to the very gradual solvability of the membrane as compared with gelatine.

Copaiba, 2*s.* 6*d.*, 18*s.* dozen. Sandal, 4*s.* 6*d.*, 36*s.* dozen.

SAVARS CUBEB CIGARETTES.

SAVARS CUBEB CIGARETTES.

Cubebs, Stramonium, and Cannabis Ind. (soothing) Relief in Asthma, Throat, Cough, Bronchitis, Influenza. A specific against Fogs.

Boxes (12) 1*s.*, 9*s.* per doz.; (36) 2*s.* 6*d.*, 24*s.* per doz.

Full Directions.

EVANS' (E) BRAND has been many years sold for. It is specially selected, and each importation *analysed*, and can be confidently offered by Chemists.

Price—1.2 in 7 and 14 lb. Tins *free*; 1/1 in 7 and 14 lb. Tins *free*, for 1 cwt.; 1/4 in ½ and 1 lb. Tins *free*. This latter price is equal to 8/ per dozen ½ lb. Tins *free*; 16/ per dozen 1 lb. Tins *free*. For 6 dozen, name and address of Chemist printed *free*.

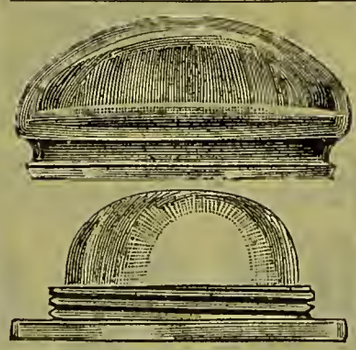
HAWLEY'S

CASCARA SAGRADA CAPSULES.

A Concentrated Fluid Extract in Gelatine.

Bottles or boxes of 24 Capsules, each containing equal to 30 drops of Fluid Extract, and of a convenient size and shape for the pocket.

Boxes, 7*s.* per dozen. Bottles, 9*s.* per dozen.



MENTHOL DOMES.

Pure Menthol, no admixture. In dome-shape cases, as accompanying figure, Boxwood, Ebony, and Vegetable Ivory. Also in other shapes. Low prices; see Drug List.

COCA WINE (SAVARS) Concentrated.

Introduced to the Trade in 1875.

3*s.* 6*d.* size, 33*s.* per dozen; 6*s.* size, 57*s.* per dozen.

LONDON—
EVANS, LESCHER & WEBB,
60 BARTHOLOMEW CLOSE.

LIVERPOOL—
EVANS, SONS & CO.,
56 HANOVER STREET. [D]

CANADA: EVANS AND SONS (LIMITED), MONTREAL AND TORONTO.

Agents: JAMIESON & CO., 263 GEORGE ST. (opposite Bond Street), SYDNEY, N.S.W.

"The Pills of McKESSON & ROBBINS are quite of the highest class of merit, in respect to the method, in respect to the materials, and in respect to results."—*British Medical Journal*, October, 1881.

A TASTELESS TONIC LAXATIVE GRANULE.

EXACT SIZE

McK. & R. PILLS.

Sample Bottles containing 25 Pills, 7s. per doz.; Bottles containing 100 Pills, 24s. per doz.

Formula, Aloin, Strychnine, and Belladonna.—McK. & R. PILLS.

Aloin, 1-5 gr. | Strychnina, 1-60 gr. | Ext. Belladonnæ, 1-8 gr.

DOSE.—One pill three times a day. Morning, noon, and night. Where a painless peristaltic action is desired by the aged or female patient, one pill may be taken every night or second night at bedtime, as directed by medical attendant.

BITTER AND NAUSEOUS DRUGS IN PALATABLE GRANULES.

Calcium Sulphide	1/10 gr.	Ergotin, equal ..3ss. Ext.	3 gr.	Morphine, Muriate	1/8 gr.	Quinine, Bi-Sulphate	1/4 gr.
" "	1/4 gr.	Euonymin	2 gr.	" "	1/4 gr.	" "	1/2 gr.
" "	1/2 gr.	Iodoform	1 gr.	Opium, Powdered	1 gr.	" "	1 gr.
" "	1 gr.	and Iron..		Podophyllin	1/8 gr.	" "	2 gr.
Cannabis Indica Ext.	1/4 gr.	Ipecac. Powdered	1/4 gr.	"	1/4 gr.	" "	3 gr.
" " "	1/2 gr.	Mercury Bin-Iodide	1/16 gr.	"	1/2 gr.	" "	4 gr.
Cascara Sagrada Ext.	3 gr.	" Proto-Iodide	1/8 gr.	" Comp.		" "	5 gr.

(Quinine, Bi-Sulphate: *70 times more soluble than Sulphate in powder.*)

Rhubarb Comp. B.P.	5 gr.
Salicylic Acid	2 gr.
" "	5 gr.
Strychnine	1/60 gr.
Zinc. Phosphide	1/4 gr.
" "	1/2 gr.
" Valerianate	1 gr.

In this form the ingredients are not only perfectly preserved, but do not affect the teeth, or offend the palate, and, further, can be conveniently kept out of sight by those who object to be regarded as invalids. Complete list mailed free on application

PLEASE SPECIFY McK. and R. PILLS.

Originated, 1870, by McKESSON & ROBBINS, New York, U.S.A.

London Agency—Messrs. S. MAW, SON & THOMPSON, 7 to 12 ALDERSGATE STREET, E.C.

Merchants, Shippers, and the Wholesale Houses in the Trade are also supplied by

Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, London, W.

Hospital and Private Formulas] [*capsuled at Special Quotations.*

ANILINE DYES

TO SUIT ALL TRADES.

BEST SPIRIT BLACK IN THE MARKET.

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PRONK, DAVIS & CO.
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COLOURS.
CHEMICALS.
INDIGO PASTE.
CUDBEAR.
DYEWOOD EXTRACTS.
BRONZE POWDERS AND METAL LEAF.

THE ORIGINAL GENUINE
EAST INDIA OIL OF MUSTARD SEED

Is strongly recommended as a safe and effectual remedy in cases of

RHEUMATISM, GOUT, RHEUMATIC GOUT, SCIATICA, LUMBAGO, HEADACHE, PAINS IN THE STOMACH, SPASMS, BRUISES, CHILBLAINS, &c.

RETAIL IN BOTTLES, 1s. EACH.

Imported by J. H. & S. JOHNSON, Wholesale Druggists, 6, 8, and 10 WHITECHAPEL, LIVERPOOL.

Wholesale Agents: London—Newbery & Sons, and Bourne, Johnson & Latimer.

R. W. GREEFF & CO., AGENTS.

THIOL (RIEDEL).

(D. R. Patent No. 38416, Registered.) Crystals, Powder, and Liquid (40 %).

SULFONAL-RIEDEL.

Sulfonal-Riedel Tablets. Awarded a Gold Medal at the Brussels Exhibition.

PEPSIN - RIEDEL, P.B. & P.G.

Manufacturer: J. D. RIEDEL, BERLIN.

ACETIC ACID,

Chem. Pure, 30, 33 (P.B.), and up to 95 per cent., and GLACIAL.

Manufactured by the LARGEST MAKERS

VEREIN FUR CHEMISCHE INDUSTRIE

(Union of Chemical Industries).

Head Office—FRANKFORT-ON-MAIN. 9 Factories.

IODOFORMIUM BITUMINATUM

(Dr. EHRMANN).

IRON REDUCED BY HYDROGEN

IN EVERY PERCENTAGE.

The Speciality of the "CHEMISCHE FABRIK" OF

Dr. PAUL LOHMANN,

HAMELN, HANOVER.

GLYCERINE, CHEM. PURE, d. d. 1,260 S. G.

CARBONATE OF MAGNESIA AND CALCINED MAGNESIA. Lightest and Purest.

TO BE OBTAINED THROUGH WHOLESALE DRUGGISTS. SOLE WHOLESALE AGENTS:

R. W. GREEFF & CO., 29 MINCING LANE, LONDON, E.C.

Coca Tablets
Coca Lozenges
Coca Elixir
Coca Tea

SOLE PROPRIETORS—

THE FRENCH HYGIENIC SOCIETY OF LONDON, 6 CONDUIT STREET, REGENT STREET, LONDON, W.

whence will be forwarded to any applicant a Pamphlet containing the testimony of eminent British and Foreign Medical Authorities to the invaluable properties of the Coca Preparations.

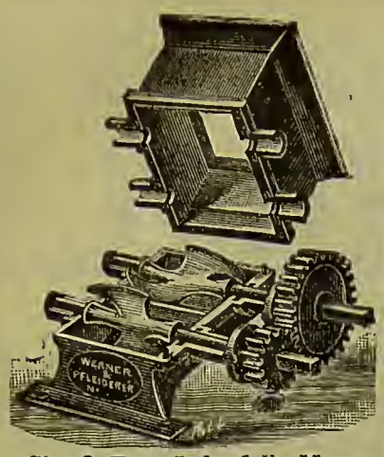
"THE CHEMIST AND DRUGGIST" (of March 30, page 429) says—"The French Hygienic Society of London have for some time made a speciality of preparations of the coca leaf, such as coca-tobacco, which were calculated to be used as articles of daily consumption; and they now add to their list several which are designed to maintain the popular use of the Peruvian Invigorator. Coca tea—an excellent blend of the coca leaf and a choice Ceylon tea—is likely to be a favourite, for it makes a pleasant beverage of good aroma which is powerfully restorative. Their coca elixir is a good idea. It is intended for use along with any table wine, 15 to 20 drops of it making with a glass of sherry a good coca wine, possessing the full flavour of the leaf. This flavour is a marked characteristic of all the preparations, especially the tablets and lozenges, and is an indication that care has been exercised in their manufacture. The tablets and lozenges may be used for throat troubles; and those without borax are a portable form of the restorative for use by athletes and pedestrians. All these specialities are put up in attractive style."

RETAIL PRICES.

Coca Tablets and Lozenges in boxes, **1/-, 2/6, & 4/-** per Box.
Coca Elixir ... ... **3/-** „ Bottle
Coca Tea in tins of 1 lb. **4/-**, ½ lb. **2/-**, ¼ lb. **1/-**.

USUAL WHOLESALE DISCOUNT. CAN BE OBTAINED FROM ALL WHOLESALE HOUSES

45



Size 3, Type I, for 1-lb. Mass.

THE "UNIVERSAL"

KNEADING AND MIXING MACHINE

FOR

PILL MASS MAKING,

ALSO FOR

Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for general Mixing and Incorporating.

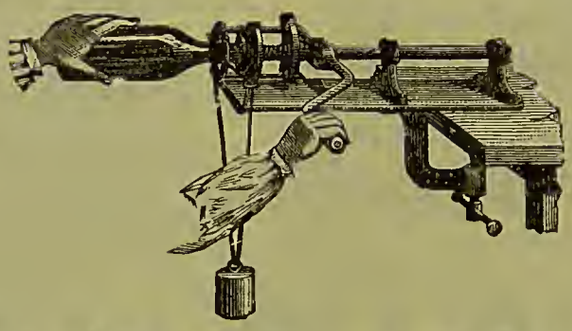
REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from ½ lb. up to 1 ton at a time.

WERNER & PFLEIDERER, 86 Upper Ground St., Blackfriars Bridge, LONDON, S.E.

NEW CAPSULING MACHINE

The only Machine which leaves no crease or pleat on the Capsule.

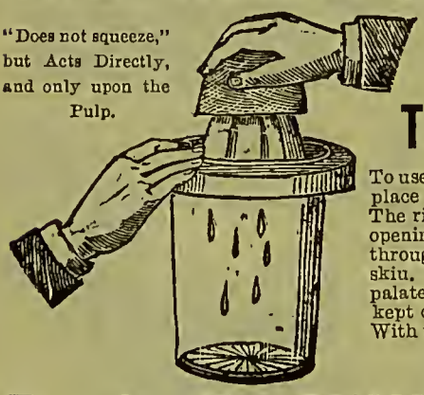


Can be fixed to any Counter. A single pull of the lever is sufficient to fix the Capsule.

Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C

THE WORLD'S BEST LEMON SQUEEZER AT 1/-

"Does not squeeze," but Acts Directly, and only upon the Pulp.



This Lemon Squeezer is to the old-fashioned article what the Railway Carriage is to the Stage Coach.

THE "MODERN" LEMON SQUEEZER.

To use it, set the squeezer upon a tumbler, as shown by the accompanying illustration, place a half lemon upon the points, press downward, and rotate the lemon slightly. The ribs easily enter the pulp, the juice as it is liberated passes down through the openings into the tumbler; these openings are too small to allow the seeds to pass through. By this process the clear juice from the PULP is obtained free from admixture with the biter oil of the skin. The juice thus prooured is doubtless a most wholesome beverage, and is certainly very agreeable to the palate. Once tried this squeezer will supplant all old-fashioned appliances. Being made of glass, it is as easily kept clean as a tumbler. This squeezer can be used by a child, without soiling the hands, it is so easily managed. With this new appliance none of the juice is lost, therefore its superiority to old types of squeezers will be obvious

WHOLESALE PRICE ON APPLICATION TO

B. & E. M'HUGH & CO., BELFAST, IRELAND.

Patents taken out for India, Canada, Victoria, Australia, Queensland New Zealand, Cape Good Hope; also Austria, Belgium, France, Germany, Italy, Norway & Spain.

DOULTON & CO., LAMBETH, LONDON, S.E.

MANUFACTURERS OF EVERY DESCRIPTION OF

WATER FILTERS.

NEW PATENT
Manganous Carbon FILTERS.
Boudoir and Table FILTERS.
Pocket and Syphon FILTERS.

House Supply or Cistern FILTERS.
Patent Granular Charcoal FILTERS.
Refrigerator FILTERS.

MAIN SERVICE FILTERS

FOR INTERMITTENT OR CONSTANT SUPPLY.

See Reports, Analyses, &c. Detailed Lists on application.
To be obtained of all Dealers.

DOULTON & CO., LAMBETH, LONDON, S.E.

DEPOTS:—100 Soho Street, LIVERPOOL; Granville Wharf, BIRMINGHAM; and 6 Rue de Paradis, PARIS.

PRICE LISTS UPON APPLICATION FROM THE TRADE

BOTTLES

FOR

CITRATE MAGNESIA
SYRUPS, CORDIALS, and LIQUEURS
COD LIVER OIL, MALT EXTRACTS
JAMS, HONEY, and PRESERVES
BOVRIL and BOUILLON PREPARATIONS
AERATED WATER TRADE
PATENT MEDICINE TRADE

SPECIALITIES FOR

PERFUMERY FACTORS

HAND-MADE SHOP ROUNDS

AT SPECIAL TRADE PRICES
PLAIN OR STOPPERED, WITH OR WITHOUT LABELLING

SHOW CARBOYS, JARS, AND POTS

IN GLASS, OPAL, EARTHENWARE, &c.

INTERNATIONAL FEEDING BOTTLES

(The chief Feeding Bottle of the Trade)
IN GREAT VARIETY, TO SUIT ALL BUYERS

SEND FOR OUR PRICE LISTS

BREFFITS'

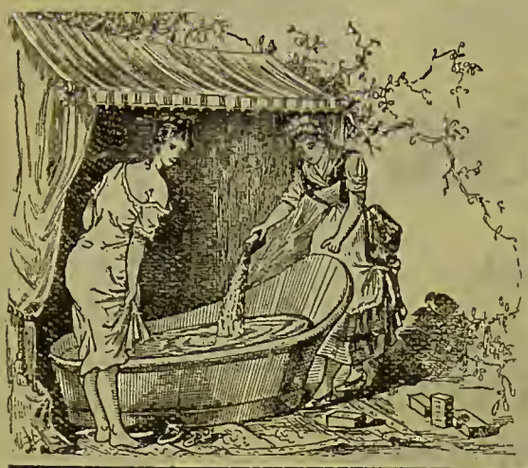
(LIMITED)

AIRE & CALDER BOTTLE CO.
83 Upper Thames St., London

DISPENSING & EVERY OTHER CLASS & DESCRIPTION OF BOTTLES

ORIENTAL AROMATIC SALTS,

FOR BATH AND TOILET PURPOSES.



The ORIENTAL AROMATIC SALTS, when dissolved, render the water very soft, and impart a most agreeable and refreshing perfume that can be diffused with advantage in a room where the air is close and depressing.

The ORIENTAL AROMATIC SALTS strengthen the tissues, perfume and invigorate the body, preserving it from contagious diseases, and cleanse the pores, thus facilitating the cutaneous transpiration so necessary to life.

The ORIENTAL AROMATIC SALTS are unrivalled for beautifying and preserving the Skin, rendering it soft and velvet-like; and for keeping the complexion perfectly bright and clear.

They are indispensable in the Bath as well as in the Bedroom, and should be used by everybody. In most cases of Skin Diseases these Salts will be found invaluable.

Sold in Bottles at 1/6. *Wholesale of the Patentees and Manufacturers—*

S. TRAVADO & CO., 27 Jewry St., E.C., LONDON.

To be had also of Messrs. BREIDENBACH & CO., Perfumers to the Queen, 157b NEW BOND STREET, W

COOK'S ANTISEPTIC SOAP

(THOMSON'S PATENT),

Has been tested in a Physiological Laboratory as a Germ Destroyer, and proved to be more efficient than any other experimented with. (*See* "Journal of Chemical Industry, 1888, No. 3.) Of great value in CASES OF

ECZEMA, RINGWORM, SCABIES, FAVUS

AND OTHER SKIN DISEASES.

See "The Lancet," 12 May, 1888, page 936.

Price in 3-Tablet Boxes, per doz. **12/-**; Selling Price, **1/6**; in ¼-gross Boxes, **10/6** per box

CAN BE OBTAINED THROUGH

MESSRS. MAW, SON & THOMPSON, LONDON, or of

EDWARD COOK & CO., HOUSEHOLD and TOILET **SOAP MAKERS, LONDON, E.**

BRECKNELL'S SPECIALTIES.

BRECKNELL'S SKIN-SOAP.—Prize Medal.
Recommended by Eminent Medical Men, and is the best for producing a clear and healthy skin.

BRECKNELL'S SADDLE SOAP.—Prize Medal.
Highest Testimonials as to its Superiority. The best article in use for the purpose.

BRECKNELL'S HARNESS COMPOSITION.
Strongly approved and recommended. Gives Black Harness a good appearance, and preserves the Leather.

BRECKNELL'S SOAP-CREAM PASTE.
An excellent and agreeable article for cleaning and improving the appearance of Brown Leather Boots. Made specially for the purpose.

BRECKNELL, TURNER & SONS,
(TO HER MAJESTY, &c.,)
31 HAYMARKET, LONDON, ENGLAND.

THE "EUREKA"

MEDICATED PINE WOOL FELT APPLIANCES.

VINCENT WOOD'S INVENTION.

WARNING.—The Trade are respectfully requested not to accept any of the above Appliances purporting to be mine unless they bear the Trade Mark "**EUREKA**" on the Felt, and the Labels have Dr. Berkley's name upon them. The reason for the above announcement is that several complaints have reached us from customers who have been persuaded to buy substitutes *of an entirely worthless character*

Chemists having any difficulty in procuring from their Wholesale Houses are requested to communicate direct with the Inventor and exclusive Manufacturer—

VINCENT WOOD, 29, 30, 31 Paternoster Sq., London, E.C.

AND AT NEW YORK AND BRUSSELS.
Please send for Price List of these Goods.

THE NURSERY, THE SICK ROOM, THE TOILET.

THE ARIEL POWDER PUFF.

(Mary Wedlake's Patent.)

Is a New Invention by which the Powder is contained *in* the Puff, and from which it is distributed in such a manner as to secure an even dispersion wherever directed. The Ariel Powder Puff never touches the skin, and, therefore, *risk from contagion* is impossible.

It may be carried in the pocket, always ready for use.

R. Farrar, House Surgeon, St. Bartholomew's Hospital, writes:—"It is simple, ingenious, and effective."

Dr. G. E. Yarrow, City of London Lying-in Hospital, writes:—"It possesses distinct advantages over the old form, amongst the most important of which is, that by its use powder is delivered on parts which are with difficulty reached by the ordinary puff."

Price 8s. and 11s. 6d. per dozen.

Of all Wholesale Houses, and of the Patentee direct.

M. WEDLAKE, 8 Berkley Rd., Regent's Park, London

HUNT'S BOTTLE CAPS

Pleated Paper, from 8d. per Gross.

LONDON:
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Depot of DIGNE'S ENAZYMES.

S. MAW, SON & THOMPSON'S

CHERRY TOOTH PASTE,

WARRANTED TO KEEP IN ANY CLIMATE.

In Round Earthenware Covered Boxes, Burnt-in Labels, 3s. 9d. and 7s. 0d. per dozen.

S. MAW, SON & THOMPSON'S

AROMATIC TOOTH PASTE.

WARRANTED TO KEEP IN ANY CLIMATE.

In Square Earthenware Covered Boxes, Burnt-in Labels, 10s. 6d. per dozen.

S. MAW, SON & THOMPSON'S

INDIAN BETEL NUT

OR

ARECA TOOTH PASTE.

WARRANTED TO KEEP IN ANY CLIMATE.

In Round Earthenware Covered Boxes, Burnt-in Labels, 3s. 9d. and 7s. 0d. per dozen.

S. MAW, SON & THOMPSON'S

CAMPHORATED TOOTH PASTE

WARRANTED TO KEEP IN ANY CLIMATE.

In Round Earthenware Covered Boxes, Burnt-in Labels, 3s. 6d. and 6s. 6d. per dozen.

S. MAW, SON & THOMPSON, LONDON.

The Chemist and Druggist says:—Mr. Arthur W. Shirley has produced a very attractive biscuit china figure, represented in the annexed engraving. The advertisement is effective without being at all vulgar, and the little crier, we expect, will soon be a familiar figure about the country.

OYEZ! OYEZ!! OYEZ!!!

THIS ELEGANT BISCUIT-CHINA FIGURE, AN ORNAMENT TO ANY SHOP,

GIVEN AWAY

To Purchasers of 25/ worth of

SHIRLEY'S A1 BRAND MENTHOL

OR TWO IF 40/ ORDER IS PLACED.

The following special parcels have been arranged to suit all classes of trade:—

PARCEL 1. 25/.	PARCEL 2. 25/.	PARCEL 3. 25/.	PARCEL 4. 25/.
4 doz. 2*d*. 1 doz. 3*d*.	4 doz. 6*d*.	3 doz. 3*d*.	1 doz. 9*d*.
2 doz. 3½*d*. 3 doz 4*d*.	2 doz. 4*d*.	2 doz. 1*s*.	2½ doz. 1*s*.
2 doz 6*d*.	1 doz. 1*s*.	1 doz 4*d*.	½ doz. 1*s*. 6*d*.
PARCEL 5. 40/.	**PARCEL 6. 40/.**	**PARCEL 7. 40/.**	**PARCEL 8. 40/.**
4 doz 2*d*. 2 doz. 3*d*.	5 doz. 6*d*.	4 doz. 6*d*. 4 doz. 4*d*.	4 doz. 1*s*.
3 doz. 3½*d*. 5 doz. 4*d*.	3 doz. 4*d*.	1 doz. 9*d*. 2 doz. 1*s*.	2 doz. 9*d*.
4 doz. 6*d*.	2½ doz. 1*s*.		½ doz. 1*s*. 6*d*.

☞ By calculating what each of the parcels would realise when sold, it will be found that they yield an average profit of 80 per cent to the retailer on his outlay.

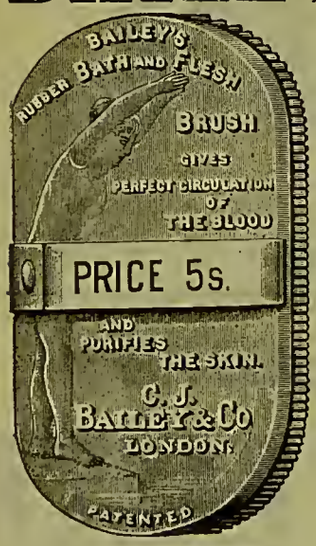
Numerous letters have been received already, testifying to the satisfaction given by this little figure. One firm writes—"We have just received the figure, and must indeed say we are highly pleased with it, and have it in a prominent place on our counter." Another writes—"It is quite the centre of attraction of my establishment." Another—"Figures sold a dozen cones first day of showing them."

A1 COCAINE & MENTHOL TOOTHACHE TUBE. 6d.
12 ON A CARD. 3/6 DOZ.
Sells really well.

A1 CORN & WART TUBE, 6d.
12 ON A CARD. 2/3 DOZ.
JUST IN TIME FOR THE SEASON.

ARTHUR W. SHIRLEY, 30 PATERNOSTER SQUARE, LONDON, E.C.

BAILEY'S RUBBER BRUSHES.



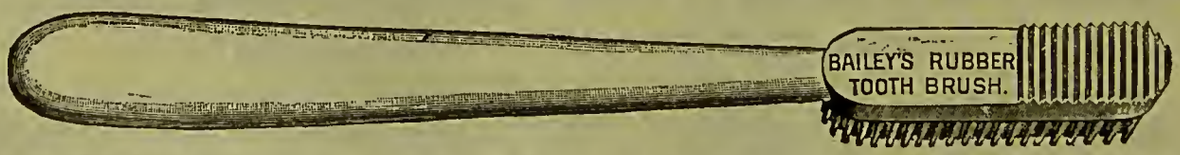
Our Bath and Flesh Brushes have been so well received by the trade, and have met with such ready sale, that it is unnecessary for us to say anything in praise of them here. We shall continue to make them of the very best quality of rubber obtainable, and, as we are advertising them largely, we have every confidence that they will continue to sell well.

PRICE
(in neat metal cases and with wood handles),
£2 2s. per dozen.

CLEAN HANDS.

Nothing has ever been invented that will so thoroughly cleanse and whiten the hands as our rubber brushes. Used with soap and water they will remove all kinds of stains without injuring the most delicate skin. They are made of the best Pará Rubber, and will last for years.

Price 1*s*., 2*s*., and 2*s* 2*d*. each retail, or 8*s*., 17*s*., and 18*s*. per dozen.



We are just now introducing our tooth brushes. They are made in two sizes, of the best rubber, and are certain to give satisfaction. Our prices are 6*s*. and 6*s*. 6*d*. per dozen. We will be pleased to send samples at the dozen prices to any chemist who may wish to see what the goods are like, and will leave the brushes to speak for themselves.

C. J. BAILEY & CO., 30 SNOW HILL, LONDON, E.C.

HYDRONAPHTHOL

AND ITS PREPARATIONS.

AN ODORLESS, NON-POISONOUS, NON-CORROSIVE ANTISEPTIC.

Fully endorsed by Eminent Practitioners who have employed it both in Medicine and Surgery.

DESCRIPTIVE PAMPHLET ON APPLICATION.

"It possesses more powerful parasiticidal properties than corrosive sublimate, whilst it is less hurtful to the tissues."—See *Brit. Med. Journ.*, page 780, April 6, 1889.

SOLE MANUFACTURERS,

SEABURY & JOHNSON,

MANUFACTURING CHEMISTS,

46 JEWIN STREET, LONDON, E.C.

NEW YORK. MONTREAL. HAMBURG.

A Lovely Bath and Toilet Water obtained by Using

PASTA MACK.

GOLD MEDAL, Hygienic Exhibition, Ostend, 1888.

This entirely New and Unrivalled Health-giving Preparation Softens the Water, instantly imparts a *Most Delicious Odour*, and Beautifies the Complexion in an extraordinary way.

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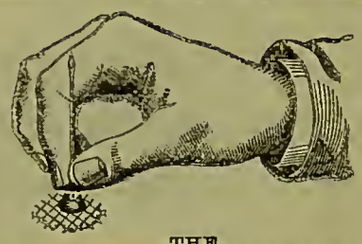

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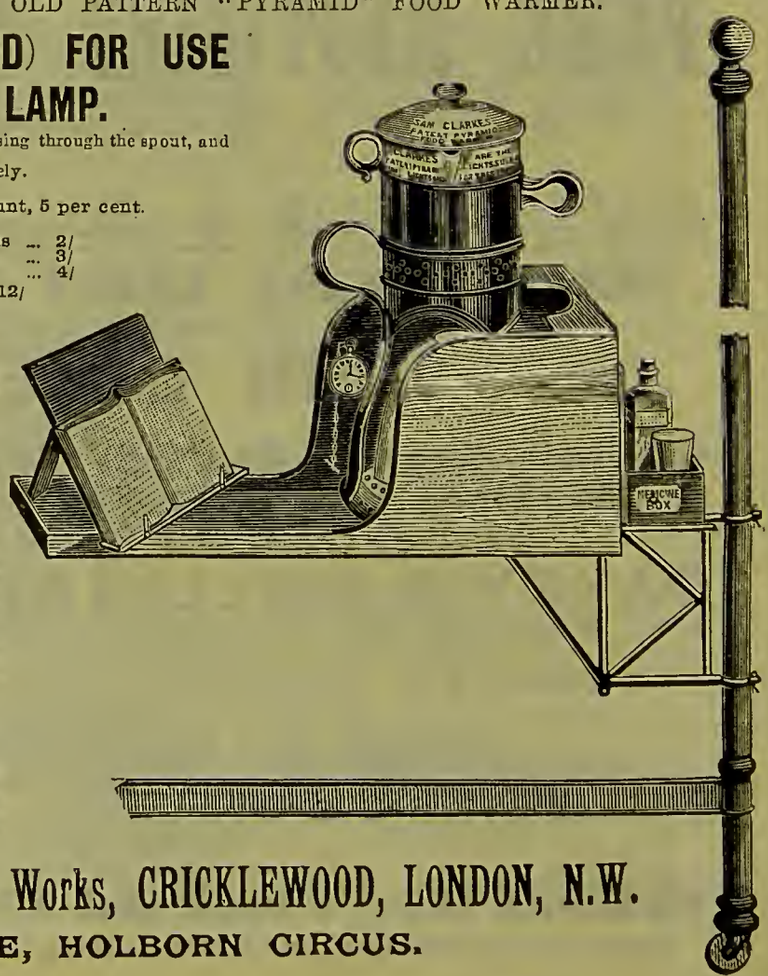

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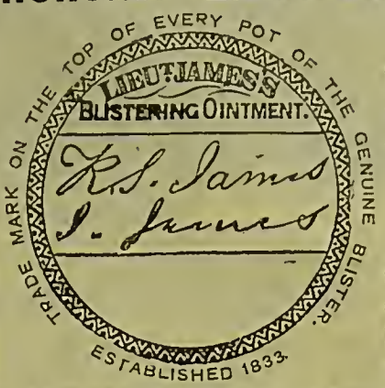

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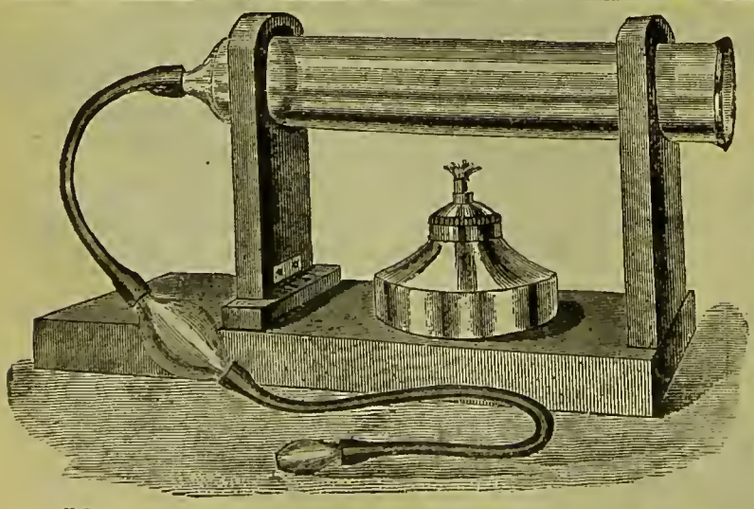

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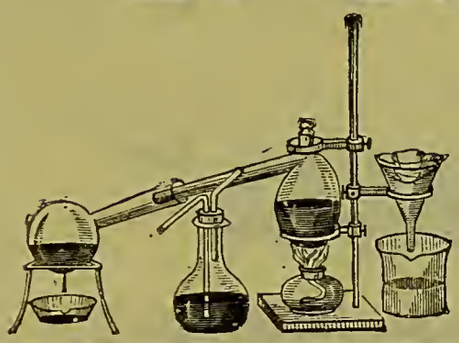

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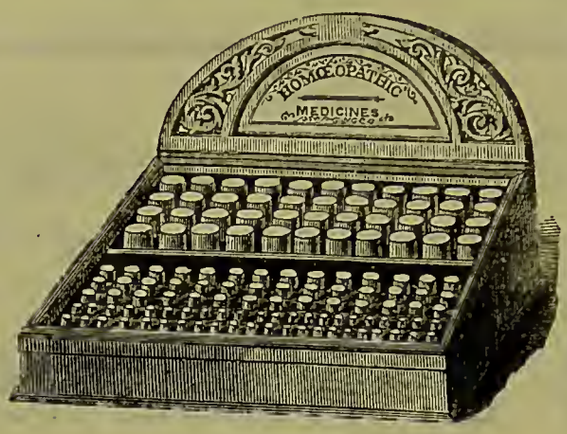

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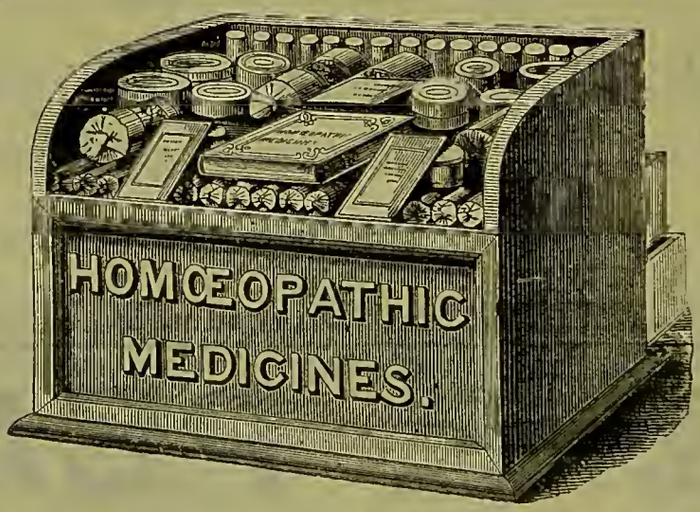

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